European Food Safety Authority

ZOONOSES MONITORING

Spain

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 Spain 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 ANIMAL POPULATIONS

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

1.1 Populations

1.1.1 Information on susceptible animal population

Sources of information

REGA (National Register for Livestock Holdings) was the source for the total number of holdings and animals in all species. The figures in this report were taken at December/31/2016.

Dates the figures relate to and the content of the figures

Number of holdings and animals: 31/12/2016

Definitions used for different types of animals, herds, flocks and holdings as well as the types covered by the information

holding' in REGA means 'Whatever place where farming animals are'. They are classified in breeding and production holdings and special holdings (such as markets, slaughterhouses, quarantine centers, ...). It have been taken into account only breeding and production holdings.The specific definitions adopted by REGA for different types of holdings are those fixed in EU or Spanish Regulations.Bovine animalsCalves for slaughter: Bovine animals less than 1 year old for slaughter as calves. Calves: Domestic animals of the bovine species, of not more than 300 kg live weight and not yet having permanent teeth.Heifers: Female bovines more than 1 year old that have not yet calved.Heifers for breeding purposes: Heifers raised for breeding and intended to replace dairy cows.Cows: Female bovines that have calvedDairy cows: Cows kept exclusively or principally for the production of milk for human consumption and/or dairy produce.Meat production animals: bovine animals, other than calves, kept exclusively for the production of meat and including cows, heifers and bulls Sheep: Domestic animals of the species Ovis.Ewes and ewe lambs put to the ram: Females of the ovine species which have already lambed at least once as well as those which have been put to the ram for the first time.Milk ewes: Ewes which are kept exclusively or principally to produce milk for human consumption and/or for processing into dairy products. This includes cast milk sheep (whether fattened or not between their last lactation and slaughtering).Other ewes: Ewes other than milk ewes; to be included in meat production animalsLambs: Male or female sheep under 12 months oldGoats: domestic animals of the species Capra.Pigs: Domestic animals of the species Sus.

2 DISEASE STATUS

2.1 TUBERCULOSIS, MYCOBACTERIAL DISEASES

2.1.1 General evaluation of the national situation

2.1.1.1 Mycobacterium - general evaluation

History of the disease and/or infection in the country

Sanitary importance of bovine tuberculosis has been based in the spread of the disease to humans. Human infection has been linked historically to raw milk consumption. At human level the surveillance of the disease is included in National Epidemiological Surveillance Network, created according with Royal Decree 2210/1995, december 25.In Spain, control of milk was carried out at council town's level since 1908, but monitoring and eradication programmes in cattle didn't start systematically until begining of 90's, focused mainly in dairy cows. At the moment the programme is being applied to cattle over six weeks of age,and to goats living close to cattle, according to Directive 64/432/EEC.Control of milk and control of fresh meat production is carried out by Autonomous Communities according to European legislation in force (hygiene package).

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

Spanish programmes for eradication on bovine tuberculosis in last years show an increase of the disease prevalence in cattle y the last 3 yearsRaw milk only can be consumed if produced in herds OTF.

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

Only few human cases had been identified as tuberculosis by Mycobacterium bovis in the last years. The risk of transmission from animals to humans is very low.

Recent actions taken to control the zoonoses

Spanish Programme on Eradication of Bovine Tuberculosis 2016.Milk control and fresh meat control production are developed according to european legislation in force (Hygiene Package).

Additional information

M. caprae has been isolated in 2005-2016 from cattle, goats, wild boards,foxes, wild ruminants.

2.1.2 Mycobacterium in animals

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

Monitoring system

Sampling strategy

Sampling strategy is defined in Spanish Programme on Eradication on Bovine Tuberculosis 2016, covering cattle according Directive 64/432/EEC(animals over six weeks of age) and goats living close to cattle. Testing is performed under supervision of competent authorities of Autonomous Communities. At slaughterhouses, samples are taken in suspicious animals and in animals with suspicious injures. Strategic use on gamma-interferon assay has been implemented since 2008 and consequently, an increase in the sensitivity at animal level (intra-herd) has been applied. .Additionally, severe interpretation of skin test(SIT) has been applied in high prevalence areas, with 2 skin tests in OTF herds and at least 3 skin tests in non-OTF herds during 2016. These measures have increased the sensitivity at herd level as well.

Frequency of the sampling

Once a year at least, more frequent testing in not officially free herds (at least 3 tests)and in OTF herds in high prevalence areas (2 at least).Pre-movement test in movements except if animals go to a closed fattening unit that send animals to slaughterhouse.

Type of specimen taken

skin test, blood, organs/tissues

Methods of sampling (description of sampling techniques)

Intradermal skin test (SIT) is used in animals over 6 weeks of age. In infected herds, gamma interferon assay is used in parallel as supplementary test in animals over six months of age. In low prevalence areas, SICCT can be used if specificity problems are detected.At slaughterhouses organs/tissues are taken from suspicious reactors animals (mainly from herds with OTF status suspended) and from injures found in routine post-mortem examination of animals slaughtered, according to the European legislation in force (Hygiene Package).

Case definition

skin test: positive and inconclusive results. In OTF herds also MTC. isolation.

Diagnostic/analytical methods used

SIT, SICCT, agent isolation, PCR and gamma-interferon assay following criteria laying down by Annex B of Directive 64/432/EEC., spoligotyping,VTNR

Vaccination policy

Forbidden

Other preventive measures than vaccination in place

Premovement test; Cleaning and disinfecting of positive holdings; Control of common grazing areas; Investigation of wildlife in some regions; Epidemiological investigations in breakdowns; inspections and official control of the field veterinarians.

Control program/mechanisms

The control program/strategies in place

Spain has an Eradication Programme approved for co-financing . Legal basis of the programme measures is Council Directive 64/432/EEC,but with increased measures like:- more frequent tests in high prevalence areas- strategic use of gamma-interferon assay- pre-movement tests- severe interpretation of SIT

Recent actions taken to control the zoonoses

More frequent testing and pre-movement test. Compulsory slaughtering of all animals in herds with high incidence or repeating positive results. Severe interpretation of tuberculin test. Research into other test methodologies. Reinforce over herd registers at farm level. Epidemiological studies. Surveillance of wildlife. Inspections in restricted herds. Inspections of field veterinarians. Training courses for field veterinarians.

Suggestions to the European Union for the actions to be taken

Research into other test methodologies and improve the existing ones.

Measures in case of the positive findings or single cases

Confirmation by isolation/PCR of MTC. If confirmed, withdrawal of OTF status by holding. Epidemiological studies, spoligotyping of the strain and inclusion in the National Database micoDB.es.

Notification system in place

Since 1952, at least (Epizootic Diseases Law).At the moment by Animal Health Law 8/2003

Results of the investigation

see table

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

Data obtained by applying of Spanish Tuberculosis Eradication and Monitoring Programme show a moderate increase of the disease at herd level and at animal level in the country . In conclusion, milk consumption can not be considered as a current source of infection in Spain, even more if it is assumed that cow milk is thermally treated. Explanation of this higher prevalence can be found in special management of this kind of herds: common grazing, ranching systems, fighting bulls, transhumance... Wildlife and goats can also be a source of infection in these holdings. The increase in the diagnostic sensitivity in 2008-2016 has important influence in the herd prevalence and incidence, that are higher than other programmes that use less sensitivity diagnostic strategies.

2.2 BRUCELLOSIS

2.2.1 General evaluation of the national situation

2.2.1.1 Brucella - general evaluation

History of the disease and/or infection in the country

Sanitary importance of brucellosis has been based in the spread of the disease to humans. At the moment brucellosis is still the main direct transmission zoonoses in the world, mainly linked to Brucella melitensis. The more frequent source of infection for human beings has been contacts with goats and sheep, but raw milk products consumption have had historical importance as well. Nowadays brucellosis is considered as a professional disease. In Spain, milk control was carried out at council town's level since 1908. At the moment milk control and control of fresh meat production is carried out by Autonomous Communities according to the European legislation in force (Hygiene Package). Monitoring and Eradication Programmes in cattle, goats and sheep did not start systematically until beginning of 90's.Before, human cases had the highest incidence in last thirty years, with around 8500 cases in middle 80s.The systematic application of national programmes has resulted in a continuous decrease of the disease in humans. At the moment the Programmes are being applied according to Directive 64/432/EEC and Directive 91/68/EEC.At human level disease brucellosis is a mandatory notifiable disease since 1943. It is included in National Epidemiology Surveillance Network, (Royal Decree 2210/1995, December 25 .

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

Spanish Programmes for eradication and monitoring of Brucellosis in cattle, goats and sheep show the continuous decreasing trend of the disease prevalence in domestic animals, close to eradication.Raw milk only can be consumed if produced in herds free or officially free.

Recent actions taken to control the zoonoses

Spanish Programme on eradication of bovine brucellosis 2016.Spanish Programme on eradication of brucellosis in goats and sheep 2016.Milk control and control of the production of fresh meat in accordance to european legislation in force (Hygiene Package).Furthermore, the Spanish Royal Decree 640/2006, of May 26, 2006, laying down specific implementation conditions of the Community rules concernig hygiene subjets, as well as foodstuff's production and commercialisation, establishes specific conditions regarding to milk and dairy milk.

2.2.2 Brucella in animals

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

Status as officially free of bovine brucellosis during the reporting year

Free regions

The 2 provinces of the Canary Islands since June 2009; Baleares, Murcia, La Rioja and Pais Vasco since 2013 and Navarra since 2015.

Monitoring system

Sampling strategy

Sampling strategy is defined in Spanish Programme for Eradication of Bovine Brucellosis, covering cattle according to Directive 64/432/EEC(animals over 12 months of age). Test are carried out by competent authorities of Autonomous Communities. At slaughterhouses samples are taken in suspicious animals, mainly in positive animals coming from free or officially free herds (suspended status) to confirm the disease.

Frequency of the sampling

Twice a year at least. Only regions with low herd prevalence can apply a reduction of the frequency following Annex A.II.2 of Council Directive 64/432/CEE. Pre-movement test.

Type of specimen taken

serum, blood, milk, organs/tissues,swabs

Methods of sampling (description of sampling techniques)

In animals over one year of age Rose Bengal as screening test or i-ELISA in milk; and Complement Fixation test or i-ELISA in serum as confirmatory test.As complementary test competition ELISA has been used as well.At slaughterhouses swabs, organs and tissues are taken in suspicious animals, mainly from herds with free or officially free status suspended, to isolate Brucella and confirm the infection.

Case definition

Positive result to Rose Bengal test confirmed by positive result to Complement Fixation test or ELISA. In high prevalence areas, positive result to any official test. In free or officially free herds Brucella abortus isolation as well. Positive result of i-Elisa in milk confirmed by serological methods.

Diagnostic/analytical methods used

Rose Bengal test, agent isolation,serum i-ELISA, milk i-ELISA, c-ELISA and Complement Fixation test, following criteria laying down by Annex B of Directive 64/432/EEC

Vaccination policy

Forbidden in general, but in high prevalence areas vaccination can be authorised with vaccine B-19 or other authorised vaccines (RB-51) according to Directive 64/432/EEC.

Other preventive measures than vaccination in place

Pre-movement test. Cleaning and disinfecting of positive holdings. Control of common grazing areas. Investigation of possible wildlife reservoirs in some regions. Epidemiological investigations in breakdowns. Inspections and official control of field veterinarians. Inspections of restricted herds.

Control program/mechanisms

The control program/strategies in place

Spain has an Eradication and Monitoring Programme approved for co-financing. Legal basis of the programme are Directive 64/432/EEC and Royal Decree 2611/1996, at last amended. Increased measures have been implemented: pre-movement test, stamping out in low prevalence areas, vaccination in high prevalence areas, more frequent testingi, nspections and official controls of field veterinarians, inspections of restricted herds.

Recent actions taken to control the zoonoses

More frequent testing and pre-movement test. Compulsory slaughter of all animals in herds with high incidence or repeating positive results, and in low prevalence areas if infection is confirmed. Research into other test methodologiesReinforce over herd registers at farm level. Epidemiological studies

Suggestions to the European Union for the actions to be taken

Research into other test methodologies and improve existing ones.

Measures in case of the positive findings or single cases

Confirmation of the infection by complement fixation test and culture, and if herd is free or officially free, status is suspended and if isolation of Brucella abortus is confirmed, lost of status by holding and, if the herd is placed in a low prevalence area, depopulation.

Notification system in place

Since 1952, at least(Epizootic Diseases Law)At the moment by Animal Health Law 8/2003

Results of the investigation

see table

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

Data obtained by the implementation of Spanish Eradication and Monitoring Programme on Bovine Brucellosis show a moderate increase of the disease in the country in 2004, following by an important decrease in 2005, 2006 and mainly in 2007-2016. In conclusion, milk consumption can't be considered as a current source of infection in Spain, even more if it is assumed that almost all the cow milk is thermally treated.

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

Brucellosis in humans is linked in Spain mainly to B. melitensis.

2.2.2.2 B. melitensis in animal - Goats - animal sample

Status as officially free of caprine brucellosis during the reporting year

Free regions

see brucella melitensis in sheep

Monitoring system

Sampling strategy

see brucella melitensis in sheep

Frequency of the sampling

see brucella melitensis in sheep

Methods of sampling (description of sampling techniques)

see brucella melitensis in sheep

Case definition

see brucella melitensis in sheep

Diagnostic/analytical methods used

see brucella melitensis in sheep

Vaccination policy

see brucella melitensis in sheep

Other preventive measures than vaccination in place

see brucella melitensis in sheep

Control program/mechanisms

The control program/strategies in place

see brucella melitensis in sheep

Recent actions taken to control the zoonoses

see brucella melitensis in sheep

Suggestions to the European Union for the actions to be taken

see brucella melitensis in sheep

Measures in case of the positive findings or single cases

see brucella melitensis in sheep

Notification system in place

see brucella melitensis in sheep

Results of the investigation

see brucella melitensis in sheep

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

see brucella melitensis in sheep

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

see brucella melitensis in sheep

2.2.2.3 B. melitensis in animal - Sheep - animal sample

Status as officially free of ovine brucellosis during the reporting year

Free regions

Canarias by Decision 2001/292/ECBaleares by Decision 2010/695/EU Galicia, Asturias, Cantabria, Castilla y Leon and Pais Vasco since 2013 and Navarra since 2014.

Monitoring system

Sampling strategy

Sampling strategy is defined in Spanish Programme on eradication and monitoring of brucellosis in sheep and goats, according to Directive 91/68/EEC:- animals over 6 months of age if not vaccinated- animals over 18 months of age if vaccinated. Tests are carried out by competent authorities of Autonomous Communities. At slaughterhouse samples are taken in suspicious animals, mainly in positive animals coming from free or oficially free herds(suspended status)to confirm de disease.

Frequency of the sampling

Once a year at least in herds free or officially free. Twice a year at least in non qualified herds.

Type of specimen taken

serum, blood, milk, organs/tissues

Methods of sampling (description of sampling techniques)

At herd level, in animals over 6 or 18 months of age Rose Bengal as screening test and Complement Fixation as confirmatory test. At slaughterhouses or at holdings, swabs, milk, organs or tissues are taken in suspicious animals, mainly from herds with free or officially free status suspended, to isolate Brucella and confirm the infection.

Case definition

Positive result to Rose Bengal confirmed by positive result to Complement Fixation.In infected herds, positive results to any official test. In free or officially free herds Brucella melitensis isolation as well.

Diagnostic/analytical methods used

Rose Bengal test, agent isolation, Complement Fixation test following criteria laying down by Annex C of Directive 91/68/EEC

Vaccination policy

Animals between 3 and 6 months of age (not in officially free herds or free herds that are on the way to gain officially free status in low prevalence areas)In high incidence areas adults can be vaccinated exceptionally to control the spread of the disease to other herds or humans.

Other preventive measures than vaccination in place

Pre-movement test in transhumance in certain areas. Cleaning and disinfecting of positive holdings. Control of common grazing areas. Epidemiological investigations in breakdowns. Inspections and official control of the field veterinarians

Control program/mechanisms

The control program/strategies in place

Spain has an Eradication Programme approved for co-financing . Legal basis of the programme measures are Directive 91/68/EEC and Royal Decree 1941/2004.

Recent actions taken to control the zoonoses

More frequent testing in non qualified herdsCompulsory slaughter of all animals in herds with high incidence or repeating positive results. Research in other test methodologies. Reinforce over herd register at farm level. Epidemiological studies

Suggestions to the European Union for the actions to be taken

Research into other test methodologies and into other vaccines. Authorisation of new tests (ELISA,FPA)

Measures in case of the positive findings or single cases

Confirmation by complement fixation test, and if herd free or officially free, status is suspended and if isolation of Brucella melitensis, lost of status by holding and depopulation if herd is placed in low prevalence area

Notification system in place

Since 1952, at least(Epizootic Diseases Law)At the moment by Animal Helath Law 8/2003

Results of the investigation

see table

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

Data obtained by implementation of Spanish Programme for Eradication and Monitoring of Brucellosis in Sheep and Goats show continuous decreasing trend of the disease in the country, following the trends of previous years.

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

The human cases have been identified mainly as Brucella melitensis, caused by direct contact between humans and infected herds, as a professional disease (farmers, veterinary surgeons...).

3 INFORMATION ON SPECIFIC ZOONOSES AND ZOONOTIC AGENTS

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

3.1 SALMONELLOSIS

3.1.1 General evaluation of the national situation

3.1.1.1 Salmonella - general evaluation

History of the disease and/or infection in the country

Salmonellosis is the second main zoonoses (in number of human cases) in European Union, also in Spain. Salmonella is the agent more frequently involved in reported foodborne outbreaks in Spain. In poultry, after the introduction in the 60's of the American production method, the specific pathology of avian salmonellosis was caused by S. pullorum and S. gallinarum. In the middle of the 80's come up a new infection in breeding flocks for meat production caused by S. enteritidis, and following it, also in laying hens and in feed S. enteritidis was isolated.

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

Nowadays the sources of infection are widespread along the food chain: feed, animals, food (eggs and ovoproducts, meat) and humans can be a source of infection. At animal level, data in breeding flocks for Salmonella spp are (from 4% in 2015 to 2.58 in 2016) and of top 5 serovars (from 0.28 in 2015 to 0.43 in 2016). Spain have reached the community target in 2016.In laying hens, flock incidence in SE/ST raised from 0.72% in 2015 to 1.59 % in 2016 (adult flocks). In broiler flocks, the prevalence of S. Enteritidis and S,Typhimurium was 0,12% in 2015 and 0.08% in 2016. In breeding turkeys the prevalence of SE/ST, including monophasic strains in 2016 was 0%.In fattening turkeys the prevalence of SE/ST, including monophasic strains in 2016 was 0.3% Data indicate that we have reached the prevalence target in poultry in Spain in 2016. At human level salmonellosis is a notifiable disease according to Royal Decree 2210/1995, laying down National Epidemiological Surveillance Network.

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

It is very difficult to establish the relevance of the data in the different steps of the food chain as sources of infection, because epidemiology of salmonellosis is very complex Nevertheless, human cases are mainly linked to eggs and egg derived food consumption.

Recent actions taken to control the zoonoses

Ministry of Agriculture and Fish, Food and Environment and Ministry of Health, Social Policy and Equality of Spain are carrying out a Control Programme of Salmonella in poultry, eggs and ovoproducts along the overall food chain, starting with monitoring systems at holdings (National Surveillance Programme).

Additional information

Spanish legislation on Salmonella in foodstuff: Royal Decree 1254/1991 of August 2, laying down rules to preparation and conservation of mayonnaise prepared in the own stablishment and for immediate consumption foods with eggs as ingredient. Royal Decree 3484/2000 of December 29, laying down hygiene rules to elaboration, distribution and commercialisation of ready-to-eat food Royal Decree 640/2006, of May 26, 2006, laying down specific implementation conditions of the Communities rules concerning hygiene subjects, as well as foodstuff's production and commercialisation.

3.1.2 Salmonella in foodstuffs

3.1.2.1 Salmonella in food - Meat from bovine animals - food sample

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

The activities are made pursuant to Regulation (EC) no 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: ISO 6579:2002

At retail

Bacteriological method: ISO 6579:2002

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

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

The activities are made pursuant to Regulation (EC) no 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: ISO 6579:2002

At retail

Bacteriological method: ISO 6579:2002

3.1.2.3 Salmonella in food - Meat from pig - food sample

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

The activities are made pursuant to Regulation (EC) no 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: ISO 6579:2002

At retail

Bacteriological method: ISO 6579:2002

3.1.2.4 Salmonella in food - Eggs - food sample

Monitoring system

Sampling strategy

The activities are made pursuant to Regulation (EC) no 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures.

Frequency of the sampling

Eggs at egg packing centres (foodstuff based approach)

Sampling distributed evenly throughout the year

Eggs at retail

Sampling distributed evenly throughout the year

Raw material for egg products (at production plant)

Sampling distributed evenly throughout the year

Egg products (at production plant and at retail)

Sampling distributed evenly throughout the year

Diagnostic/analytical methods used

Eggs at egg packing centres (foodstuff based approach)

Bacteriological method: ISO 6579:2002

Eggs at retail

Bacteriological method: ISO 6579:2002

Raw material for egg products (at production plant)

Bacteriological method: ISO 6579:2002

Egg products (at production plant and at retail)

Bacteriological method: ISO 6579:2002

Control program/mechanisms

Recent actions taken to control the zoonoses

In 2003 a workshop was organised for "Salmonella in eggs and egg products" coordinated by the Spanish Food Safety and Nutrition Agency. The result was the approval between all the competent authorities in this area of the "Programme on Salmonella spp in eggs and egg products".

3.1.3 Salmonella in animals

3.1.3.1 Salmonella in animal - Cattle (bovine animals) - animal sample

Monitoring system

Sampling strategy

Samples are taken ramdomly (day of sampling each month) in 17 slaughterhouses (distribution of the number of samples according to the capacity of sacrifice of each slaughterhouse) placed in different regions of Spain and representative of the total volume of sacrifice of the country (around 58,5%) in the year 2015.

Frequency of the sampling

Animals at slaughter (herd based approach)

monthly (each to years)

Type of specimen taken

Animals at slaughter (herd based approach)

Faeces

Methods of sampling (description of sampling techniques)

Animals at slaughter (herd based approach)

Two faecal samples at colon level are taken in all the slaughter batches in the day of sampling, with a maximun of 30 batches by slaughterhouse and day of sampling . A total of 384 slaughter batches have been tested in 2015.Faeces are taken from the colon, refrigerated immediately and sent to the laboratory and analysed within 24 hours.

Case definition

Animals at slaughter (herd based approach)

A slaughter batch is positive if Salmonella spp. has been isolated from at least one of the two samples of each slaughter batch of calves.

Diagnostic/analytical methods used

Animals at slaughter (herd based approach)

Bacteriological method: ISO 6579:2002/Amd 1:2007; PCR.

Results of the investigation

No investigation performed in 2016

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

The monitoring programme is implemented each 2 years. Then, the next monitoring programme will be performed in 2017.

3.1.3.2 Salmonella in animal - Gallus gallus (fowl) - broilers - animal sample

Monitoring system

Sampling strategy

Broiler flocks

Following point 1 of the Annex of Commission Regulation (EC) 200/2012 implementing Regulation (EC) 2160/2003 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in broilers.

Frequency of the sampling

Broiler flocks: Before slaughter at farm

Broiler flocks: Before slaughter at farm 3 weeks prior to slaughter (FBO control and official control). Official control sampling is performed in at least one flock on 10% of the holdings with more than 5000 birds.

Type of specimen taken

Broiler flocks: Before slaughter at farm

Faeces (boot swabs)

Methods of sampling (description of sampling techniques)

Broiler flocks: Before slaughter at farm

Following point 2 of the Annex of Commission Regulation (EC) 200/2012 implementing Regulation (EC) 2160/2003 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in broilers.

Case definition

Broiler flocks: Before slaughter at farm

A flock of broilers shall be considered positive for the purpose of verifying the achievement of the Community target, where the presence of Salmonella enteritidis and/or Salmonella typhimurium, including monophasic strains (other than vaccine strains) was detected in the flock at any occasion.

Diagnostic/analytical methods used

Broiler flocks: Before slaughter at farm

Bacteriological method: ISO 6579:2002

Vaccination policy

Broiler flocks

Does not exist.

Other preventive measures than vaccination in place

Broiler flocks

Biosecurity measures. Compliance with Good Practice Code

Control program/mechanisms

The control program/strategies in place

Broiler flocks

National Control and Monitoring Plan on Salmonella in broiler flocks 2016, approved for co-financing by Decision Number SANTE/2016/ES/SI2.725989

Recent actions taken to control the zoonoses

National Control and Monitoring Plan on Salmonella in broiler flocks 2016, including biosecurity measures and compliance with Good Practice Code following Regulations 2160/2003, 1177/2006 and 200/2012.

Measures in case of the positive findings or single cases

Broiler flocks: Before slaughter at farm

Verification of the compliance of biosecurity measures .Cleaning, disinfection and treatment against rodents and insects. Verification of the efficacy of cleaning and disinfection. Epidemiological investigation

Notification system in place

Since 1952, at least (Epizootic Diseases Law). At the moment by Animal Health Law 8/2003, Royal Decree 328/2003 and Royal Decree 1940/2004.

Results of the investigation

see table

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

Spain has already reached the community target.

3.1.3.3 Salmonella in animal - Pigs - animal sample

Monitoring system

Sampling strategy

Fattening herds

Samples are been taken ramdomly (day of each month) in slaughterhouses (distribution of the number of samples according to the capacity of sacrifice of each slaughterhouse)placed in different regions of Spain and representative of the total volume of sacrifice of the country(58%) in the year 2015.

Frequency of the sampling

Fattening herds at slaughterhouse (herd based approach)

monthly (each 2 years)

Type of specimen taken

Fattening herds at slaughterhouse (herd based approach)

faeces

Methods of sampling (description of sampling techniques)

Fattening herds at slaughterhouse (herd based approach)

Two faecal samples at colon level are taken from all the slaughter batches in the day of sampling, with a maximum of 30 batches by slaughterhouse and day of sampling . Each batch belonged to different herds. A total of 384 batches were tested in 2015. .Samples were refrigerated immediatley and sent to the laboratory and analysed within 24 hours.

Case definition

Fattening herds at slaughterhouse (herd based approach)

A slaughter batch is considered positive for the purpose of this survey if Salmonella spp. has been isolated from the pooled sample of faeces.

Diagnostic/analytical methods used

Fattening herds at slaughterhouse (herd based approach)

Bacteriological method: ISO 6579:2002/Amd 1:2007; PCR

Results of the investigation

No investigation performed in 2016.

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

The monitoring programme is implemented each 2 years. Then, the next monitoring programme will be performed in 2017.

3.1.3.4 Salmonella in animal - Gallus gallus (fowl) - breeding flocks, unspecified - animal sample

Monitoring system

Sampling strategy

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

Following point 2 of the Annex of Commission Regulation (EU) 200/2010 of 10 March, implementing Regulation (EC) 2160/2003 as regards a Community target for the reduction of the prevalence of certain Salmonella serotypes in breeding flocks of Gallus gallus. This sampling strategy is implemented by the Spanish National Surveillance and Control Programme on Salmonella in Breeding Flocks of Gallus gallus, approved for co-financing by Decision Number SANTE/2016/ES/SI2.725989

Frequency of the sampling

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks

Every flock is sampled

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

birds of 4 weeks of age and 2 weeks prior movement to laying period.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Production period

Other: FBO controls: every 2 weeks. Additionally to the FBO controls, during production period an official control sampling is performed, with the following frequency: 1. within 4 weeks following moving to the laying phase or laying unit 2. towards the end of the laying phase and not earlier than 8 weeks before the end of the production cycle 3. during the production period at time distant enough from the sampling referred in points 1. and 2. (In Spain we have got the target during the last 2 years, so the number of official controls can be reduce from 3 to 2 if the CA considers it appropriate).

Type of specimen taken

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

Faeces / boot swabs

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Production period

Faeces / boot swabs

Methods of sampling (description of sampling techniques)

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks

1. One sample made up of from 10 samples taken of the internal coverings of the cages transporting the chicks taken when they are delivered to the holding. The bases of the cages may be used directly as a sample, which will be sent either whole or in parts to the laboratories responsible for processing samples and may be made up of a single or more than one sample, or 2. Liver, caecum and yolk sac of 60 chicks (these parts of the viscera can be removed and processed as a single sample), or 3. A sample made up of meconium from at least 250 chicks.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

Faeces from different points of the holding or boot swabs. Faeces or boot swabs can be pooled for analysis up to a minimum of two pools.

Breeding flocks: Production period

Following point 2 of the Annex of Commisison Regulation (EU) 200/2010 of 10 March, implementing Regulation (EC) 2160/2003 as regards a Community target for the reduction of the prevalence of certain Salmonella serotypes in breeding flocks of Gallus gallus.

Case definition

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks

A breeding flock shall be considered positive when the presence of the relevant Salmonella serotypes (other than vaccine strains) has been detected in one or more samples taken in the flock, even if the relevant Salmonella serotypes is only detected in the dust sample, or when the confirmatory sampling as part of official controls in accordance with point 2.2.2.2(b) does not confirm the detection of relevant Salmonella serotypes but antimicrobials or bacterial growth inhibitors have been detected in the flock.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

A breeding flock shall be considered positive when the presence of the relevant Salmonella serotypes (other than vaccine strains) has been detected in one or more samples taken in the flock, even if the relevant Salmonella serotypes is only detected in the dust sample, or when the confirmatory sampling as part of official controls in accordance with point 2.2.2.2(b) does not confirm the detection of relevant Salmonella serotypes but antimicrobials or bacterial growth inhibitors have been detected in the flock.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Production period

A breeding flock shall be considered positive when the presence of the relevant Salmonella serotypes (other than vaccine strains) has been detected in one or more samples taken in the flock, even if the relevant Salmonella serotypes is only detected in the dust sample, or when the confirmatory sampling as part of official controls in accordance with point 2.2.2.2(b) does not confirm the detection of relevant Salmonella serotypes but antimicrobials or bacterial growth inhibitors have been detected in the flock.

Diagnostic/analytical methods used

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks

Bacteriological method: ISO 6579:2002

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

Bacteriological method: ISO 6579:2002

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Production period

Bacteriological method: ISO 6579:2002

Vaccination policy

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

Voluntary/Compulsory in rearing flocks of the meat production line if one of the relevant Samonella serovars was detected in the preceeding flock

Other preventive measures than vaccination in place

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

Biosecurity measures. Compliance with Good Practice Code.

Control program/mechanisms

The control program/strategies in place

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

Spanish National Control and Monitoring Programme on Salmonella in Breeding Flocks of Gallus gallus 2016, approved for cofinancing by Decision Number SANTE/2016/ES/SI2.725989

Recent actions taken to control the zoonoses

Compulsory National Control and Monitoring Programme on Salmonella in Breeding Flocks of Gallus gallus 2016.

Measures in case of the positive findings or single cases

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

According to the compulsory National Control and Monitoring Programme on Salmonella in Breeding Flocks of Gallus gallus 2016, including:movement of live birds forbbidendestruction or treatment of eggssacrifice-depopulation of the flockepidemiological investigationscontrol of biosecurity measurescontrol of the effectiveness of cleaning and disinfection

Notification system in place

Since 1952, at least (Epizootic Diseases Law). At the moment by Animal Health Law 8/2006, Royal Decree 328/2003 and Royal Decree 1940/2004.

Results of the investigation

See table

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

The incidence on top 5 have increased from 2015 (0,28%) to 2016 (0.43%) . Spain has reached the Community reduction (less than 1%) target for 2016.

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

Breeding flocks for egg production can be considered a very low source of infection for humans, with no positive flock to Salmonella

3.1.3.5 Salmonella in Turkeys - breeding flocks and meat production flocks

Monitoring system

Sampling strategy

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

Following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Meat production flocks

Following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Frequency of the sampling

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks

Following point 1 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

Following point 1 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Production period

Other: Following points 1 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Meat production flocks: Before slaughter at farm

Other: Following point 1 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Type of specimen taken

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks

Other: Following points 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Production period

Other: Following point 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Meat production flocks: Before slaughter at farm

Following points 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Methods of sampling (description of sampling techniques)

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks

Following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

Following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Production period

Following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Meat production flocks: Before slaughter at farm

Following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium, including monophasic strains in turkeys.

Case definition

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

A flock of turkeys shall be considered positive for the purpose of verifying the achievement of the Community target, where the presence of Salmonella enteritidis and/or Salmonella typhimurium, including monophasic strains (other than vaccine strains) was detected in the flock at any occasion. Positive flocks of turkeys shall be counted only once per round, irrespective of the number of sampling and testing operations and only be reported in the year of the first positive sampling.

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

A flock of turkeys shall be considered positive , where the presence of Salmonella enteritidis and/or Salmonella typhimurium, including monophasic strains (other than vaccine strains) was detected in the flock at any occasion.

Meat production flocks: Rearing period

A flock of turkeys shall be considered positive for the purpose of verifying the achievement of the Community target, where the presence of Salmonella enteritidis and/or Salmonella typhimurium, including monophasic strains (other than vaccine strains) was detected in the flock at any occasion.

Meat production flocks: At slaughter (flock based approach)

Bacteriological method: ISO 6579:2002

Diagnostic/analytical methods used

Breeding flocks (separate elite, grand parent and parent flocks when necessary): Rearing period

Bacteriological method: ISO 6579:2002

Meat production flocks: Rearing period

Bacteriological method: ISO 6579:2002

Meat production flocks: At slaughter (flock based approach)

Voluntary

Vaccination policy

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

It does not exist.

Meat production flocks

Biosecurity measures. Compliance with Good Practice Code

Other preventive measures than vaccination in place

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

Biosecurity measures. Compliance with Good Practice Code

Meat production flocks

Spanish National Control and Monitoring Programme on Salmonella in Breeding Flocks of Turkeys 2016

Control program/mechanisms

The control program/strategies in place

Breeding flocks (separate elite, grand parent and parent flocks when necessary)

Spanish National Control and Monitoring Programme on Salmonella in Meat Production Flocks of Turkeys 2016

Meat production flocks

Compulsory National Control and Monitoring Programme on Salmonella in Breeding Flocks and Meat Production Flocks of Turkeys 2016, following criteria of Regulation (EC) 584/2008.

Measures in case of the positive findings or single cases

Meat Production flocks

Since 1952, at least (Epizootic Diseases Law). At the moment by Animal Health Law 8/2006, Royal Decree 328/2003 and Royal Decree 1940/2004.

Notification system in place

see table

Results of the investigation

In 2016, Spain has achieved the community target.

3.2 CAMPYLOBACTERIOSIS

3.2.1 General evaluation of the national situation

3.2.1.1 Thermophilic Campylobacter spp., unspecified - general evaluation

History of the disease and/or infection in the country

Campylobacter spp. is at the moment the most frequent reported gastrointestinal disease in humans. Poultry are the main reservoir, and infection happens usually by consumption of poultry meat. Until the end of the 60's importance of Campylobacter spp. was not valued. Notification of the disease is also under valuated in surveillance systems. Epidemiology investigations show an association of cases to poultry meat consumption and a deficient handle of food. Campilobacteriosis is a mandatory disease in Spain, since 2015.

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

Poultry meat is the main source of infection.Another food implicated are red meat, raw milk, non -pasteurized cheese, and water.

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

More studies need to be developed. In 2016, active monitoring programmes have been performed in in broilers and fattening turkeys and in cattle and pigs in 2015.

Recent actions taken to control the zoonoses

Monitoring of the zoonoses according to Council Directive 2003/99/EEC.

3.2.2 Campylobacter in foodstuffs

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

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

The activities are made according to Regulation (EC) no 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs) must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

fresh meat and skin

At meat processing plant

fresh meat and skin

At retail

fresh meat and skin

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

bacteriological method: ISO 10272:2006

At meat processing plant

Bacteriological method:ISO10272:2006

At retail

Bacteriological method: ISO 10272:2006

3.2.3 Campylobacter in animals

3.2.3.1 Campylobacter spp., unspecified in animal - Turkeys - fattening flocks - animal sample - Monitoring - EFSA specifications

Monitoring system

Sampling strategy

Samples have been taken ramdomly (day of sampling each month) in 6 slaughterhouses (distribution of the samples according to capacity of sacrifice of each slaughterhouse) placed in different regions of Spain and representative (100%) of the total volume of sacrifice of the country.

Frequency of the sampling

between January and December 2016

Type of specimen taken

Caecum samples

Diagnostic/analytical methods used

isolation in agar mCCDA(Oxoid) and identification by PCR multiplex.

Vaccination policy

doesn't exist

Other preventive measures than vaccination in place

biosecurity measures, implementation of good higyene practices

Control program/mechanisms

The control program/strategies in place

doesn't exist

Results of the investigation

Investigations of the human contacts with positive cases

Number of slaughter batches tested: 488 Number of slaughter batches positive: 88 C. jejuni and 230 C. coli; 1 isolate of C. jejuni were non-typable and the AST was not possible to be performed.More studies need to be performed, the next monitoring programme will be performed in 2018.

3.2.3.2 Thermophilic Campylobacter spp., unspecified in animal - Cattle (bovine animals) - animal sample

Monitoring system

Sampling strategy

Samples have been taken randomly (day of sampling each month)at slaughterhouses (distribution of the samples according to the capacity of sacrifice of each slaughterhouse) placed in different regions of Spain and representative of the total volume of sacrifice of the country(58,5% in 2015).

Frequency of the sampling

Two faecal samples at colon level are taken in all the slaughter batches in the day of sampling, with a maximum of 30 batches by slaughterhouse and day of sampling . Each batch belonged to different holdings. A total of 768 sampleswere taken in 2015, belonging to 384 slaughter batches and 384 different holdings. Faeces were taken from the colon, refrigerated immediately and sent to the laboratory and analysed within 24 hours.

Type of specimen taken

Faeces

Methods of sampling (description of sampling techniques)

Faeces were taken from the colon, refrigerated immediately and sent to the laboratory and analysed before 24 hours.

Case definition

One slaughter batch was considered as positive if isolation of Campylobacter spp. by culture and identification by PCR

Diagnostic/analytical methods used

Isolation in agar mCCDA(Oxoid) and agar Campyfood (bioMerieux) and identification by PCR multiplex.

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

The monitoring programme will be implemented each 2 years. Then, a new monitoring programme will be implemented in 2017.

3.2.3.3 Thermophilic Campylobacter spp., unspecified in animal - Pigs - fattening pigs - animal sample

Monitoring system

Frequency of the sampling

2 faecal samples by slaughter batch with 10 animals or more, with a maximun of 30 slaughter batches by slaughterhouse and day of sampling. Each batch belonged to different herds .Sampling has been performed at slaughterhouses representing an important part of all the fattening pigs sacrificed in Spain (58% in 2015).A total of 768 samples have were taken in 2015, belonging to 384 slaughter batches and 384 different holdings. Samples were refrigerated immediately and sent to the laboratory and analysed within 24 hours.

Type of specimen taken

Faeces

Methods of sampling (description of sampling techniques)

2 faecal material samples by slaughter batch and by holding

Case definition

a slaughter batch is considered as positive if isolation by bacteriological method and PCR identification

Diagnostic/analytical methods used

isolation in agar mCCDA(Oxoid) and agar Campyfood(bioMerieux) and identification by PCR multiplex

Vaccination policy

Doesn't exist

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

The monitoring programme will be implemented each 2 years, and then the new one will be performed in 2017.

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

More studies need to be developed

3.2.3.4 Thermophilic Campylobacter spp., unspecified in animal - Gallus gallus (fowl) - broilers - animal sample

Monitoring system

Sampling strategy

Samples have been taken randomly (day of sampling each month) at 17 slaughterhouses (distribution of the samples according to capacity of sacrifice of each slaughterhouse) placed in different regions of Spain and representative (60% in 2015) of the total volume of sacrifice of the country

Frequency of the sampling

At slaughter

At slaughter Between January and December 2016

Type of specimen taken

At slaughter

At slaughter Caecum

Methods of sampling (description of sampling techniques)

At slaughter

10 caecum samples have been taken from 10 animals of all the slaughter batches in the day of sampling, with a maximum of 30 batches by day of sampling. Each batch belonged to different flocks. A total of 500 samples have been taken, belonging to 500 slaughter batches and 500 different holdings. Samples were refrigerated immediately, sent to the laboratory, and analysed within 24 hours.

Case definition

At slaughter

A slaughter batch is considered positive for the purpose of this survey if Campylobacter spp. has been isolated from at least one of the 10 samples of the slaughter batch.

Diagnostic/analytical methods used

At slaughter

Other:isolation in agar mCCDA(Oxoid) and identification by PCR multiplex.

Vaccination policy

doesn't exist

Other preventive measures than vaccination in place

biosecurity measures, implementation of good higyene practices

Control program/mechanisms

The control program/strategies in place

doesn't exist

Results of the investigation

Number of slaughter batches tested: 500 Number of slaughter batches positive: 162 C. jejuni and 93 C. coli; 1 isolates of C. jejuni were nontypable and the AST was not possible to be performed.

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

More studies need to be performed, the next monitoring programme will be performed in 2018.

3.3 LISTERIOSIS

3.3.1 General evaluation of the national situation

3.3.1.1 Listeria - general evaluation

History of the disease and/or infection in the country

Listeria monocytogenes has been recognised as a human pathogen for more than 50 years. It causes invasive illness mainly in certain well defined high-risk groups, including immunocompromised persons, pregnant women and neonates. However listeriosis can occur in otherwise healthy individuals, particularly in the setting of an outbreak. The public health importance of listeriosis is not always recognised particularly because listeriosis is a relatively rare disease compared to other common food-borne illnesses such as salmonellosis. Also listeriosis is a disease that clinically affects cattle, but mainly ewes in Spain.

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

Listeria is a serious food safety issue, particularly for pregnant women, the elderly, and those who are immunocompromised in Spain. In 2013 the number of reported human cases was 143. Listeriosis is a mandatory disease in Spain, since 2015.

Recent actions taken to control the zoonoses

The activities are made according to Regulation (EC) 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs). must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures. Sampling is distributed evenly throughout the year.

Additional information

Diagnostic methods used in food : Bacteriological method: ISO 11290-2_:2004.

3.4 YERSINIOSIS

3.4.1 General evaluation of the national situation

3.4.1.1 Yersinia - general evaluation

History of the disease and/or infection in the country

Yersiniosis is a mandatory disease in Spain, since 2015.

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

The number of Yersinia enterocolitica human cases reported to the Microbiological Information System was 243 in 2013, versus 220 cases in 2012. At animal level, an active monitoring programme in fattening pigs at slaughter in 2015 detected Y. enterocoltica in 41,7% of the slaughter batches tested. All the strains belonged to biotype 4 serotype O:3.

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

Animals are the main source of Yersinia. Fecal wastes from animals (particularly pigs) may contaminate water, milk and foods and become a source of infection for people or other animals.

Recent actions taken to control the zoonoses

The activities are made according to Regulation (EC) no 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs). Controls must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures.At animal level, active monitoring programmes have been performed in pigs at slaugtherhouse in 2007-2011, 2013 and 2015. The next one will be performed in 2017.

3.4.2 Yersinia in animals

3.4.2.1 Yersinia in animal - Pigs - animal sample

Monitoring system

Sampling strategy

Animals at slaughter (herd based approach)

Samples have been taken ramdomly (day of each month) at slaughterhouses (distribution of the number of samples according to the capacity of sacrifice of each slaughterhouse)placed in different regions of Spain and representative of the total volume of sacrifice of the country(58%) in the year 2015.

Frequency of the sampling

Animals at slaughter (herd based approach)

monthly (each two years)

Type of specimen taken

Animals at slaughter (herd based approach)

tonsils

Methods of sampling (description of sampling techniques)

Animals at slaughter (herd based approach)

One sample of tonsils have been taken from all the slaughter batches in the day of sampling, with a maximum of 30 batches by slaughterhouse and day of sampling . Each batch belonged to different herds. A total of 384 batches were tested in 2015. Samples were refrigerated immediately and sent to the laboratory and analysed within 24 hours.

Case definition

Animals at slaughter (herd based approach)

isolation of Yersinia in the sample of tonsils

Diagnostic/analytical methods used

Animals at slaughter (herd based approach)

ISO 10273:2003

Results of the investigation

see table

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

The monitoring programme will be implemented each 2 years. Then, the next monitoring programme will be performed in 2017.

3.5 TRICHINELLOSIS

3.5.1 General evaluation of the national situation

3.5.1.1 Trichinella - general evaluation

History of the disease and/or infection in the country

Trichinellosis is a notifiable zoonosis, cases are usually associated to outbreaks, two outbreaks occurred in 2013 and 2014, one each year.

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

Sources of infection are mainly associated to the consume of meat and raw meat products of wild boars killed in hunting or pigs slaughtered at home and which carcasses has not been examined post-mortem.

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

Most cases are caused by Trichinella spiralis. Trichinella britovi has previously been associated with outbreaks due to the consumption of boar meat, and meat from other wild animals but in the last years T britovi was associated with pork meat and transmitted through the consumption of meat from a domestic pig.

Recent actions taken to control the zoonoses

The activities against this zoonoses are the Official Control:Examination of fresh meat and killed in hunting according to European legislation in force:Commission Regulation (EC) Number 2075/2005 of December 5, 2005 laying down specific rules on official controls for trichinella in meat and Commission Regulation (EC) Number 1665/2006 amending Comission Regulation (EC) Number 2075/2005) Domestic killing for self consumption and wild game meat to be sold at retail is regulated by the Spanish Royal Decree 640/2006, of May 26, 2006, laying down specific implementation conditions of the Communities rules concerning hygiene subjects, as well as foodstuff's production and commercialisation. According to article seven of the Commission Regulation (EC) Number 2075/2005 of December 5, 2005, laying down specific rules on official controls for Trichinella in meat, Spain has prepared a contingency plan outlining all action to be taken when samples referred to in articles 2 and 16 test are positive to Trichinella. This plan includes details covering:(a)traceability of infested carcass(s);(b)measures for dealing with infested carcass(s) and parts thereof;(c)investigation of the source of investigation and any spreading among wildlife;(d)any measures to be taken at retail or consumer level;(e)measures to be taken where the infested carcass(s) cannot be identified at the slaughterhouse;(f)determination of the Triquinella species involved. In Spain the Triquinella examination is compulsory for meat from trichinella susceptible species, including domestic killing for self-consumption.

3.6 ECHINOCOCCOSIS

3.6.1 General evaluation of the national situation

3.6.1.1 Echinococcus - general evaluation

History of the disease and/or infection in the country

Echinococcosis was a notifiable disease in some Spanish regions, since 2015 it is a mandatory disease in all the Spanish regions. Human hydatidosis has been a Mandatory Notifiable Royal Decree 2210/1995, laying down the National Epidemiologyc Surveillance Network, classify echinococcosis as an endemic disease at regional frame. In 80s many regions started to set up a control programme based in control of animal echinococcosis and in general peoples health education and focused in professionals related with animals and at school level. Similar control programmes have been developed in other Authonomous Communities. The implementation of these control programmes got good results in the decrease of the incidence of the disease. Routine post-mortem examination at slaughterhouse has being carried out according to European legislation in force (Hygiene Package).

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

Control programmes in endemic regions got good results in the dicrease of the disease at human level. Main source of infection in Spain is cycle between sheep,dog and humans.The epidemiological surveillance of human CE was initiated in the 1950s by the provincial health government authorities, through an active search of cases with individualized information

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

Higher incidence values of human cases are situated in regions with the highest census of sheep and goats.

Recent actions taken to control the zoonoses

Surveillance according to Directive 2003/99/EEC.Control programmes in endemic regions.Inclusion in National Epidemiology Surveillance Network according to Royal Decree 2210/1995.The activities against this zoonoses are the Official Control in fresh meat according to european Legislation in force (Hygiene package).

3.7 RABIES

3.7.1 General evaluation of the national situation

3.7.1.1 Lyssavirus (rabies) - general evaluation

History of the disease and/or infection in the country

Paralytic and furious forms of rabies are described in the second book of the Hunting Agreement in the time of King Alfonso XI (1312-1350).The Royal Assembly of Health publication of 23 November 1786 adopted measures to avoid transmission of rabies controlling movement of dogs and cats.Royal Order of 1863 describes "measures of preservation that one has to follow in each case where the bite has been from a supposed rabid animal" and also set down the measures against rabies in animals, which were to be adopted by Local Authorities.At the beginning of the 20th century the Law of 18 December 1914 and Regulation of 4 June 1915 are approved to prevent the transmission of human .On 12 May 1947 the Ministry of Agriculture issued a General Order establishing the measures to be taken against rabies and a second Order of 1948 established the norms for animal vaccination and control.During the 1950s the first mass dog vaccination campaigns took place.The Epizootics Law of 20 December 1952 established the general regulations of the anti-rabies programme.Urban rabies has been the main epidemiologycal form in the history of the disease in Spain, with dogs as reservoir of the infection.Spain is free of land rabies since 1966, with exception of Ceuta and Melilla, that have a regular notification of animal cases of rabies by their situation in North Africa, where rabies is endemic.In peninsular territory an imported outbreak was reported in 1975 in the province of Malaga by introduction of dogs coming from North Africa. This outbreak ended in 1977 with 122 animals infected (dogs and cats, and 2 foxes) and one case of human rabies.Since 1979 only sporadically cases by EBLV in bats (Eptesicus serotinus and Eptesicus isabellinus) have been reported in peninsular territory.In June 2013, a positive dog illegally imported from North Africa was confirmed on rabies (RABV) in Spain mainland .According to the Action Plan in rabies, Spain declared the Alert Level 1 for six months, with increased control measures in the risk area. This control measures included mandatory vaccination of dogs, cats and ferrets, surveillance of animal contacts, control of stray animals, control of cadavers of domestic and wild carnivores and movement restrictions. In 2014, an imported human case from Morocco was detected in the Peninsula. The patient was a 46-year-old woman with residence in Spain, who was bitten by a dog while she was visiting her relatives in Morocco.

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

Since 1978 Spanish mainland and islands remains free of rage in terrestrial mammals. Only a few cases of EBL have been reported in bats. These data show that the main source and risk for the apparition of cases of rabies in Spain is the importation of animals with the infection from Morocco and other countries of North Africa.

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

Since 1975 no human cases with origin in peninsular territory and islands have been reported.

Recent actions taken to control the zoonoses

Compulsory surveillance of the disease according to article 4 of Directive 2003/99/EEC,came into force by Royal Decree 1940/2004.Compulsory vaccination of dogs in 12 autonomous comunities, Ceuta and Melilla. Voluntary in the rest.Studies including active surveillance of LB-1 in bats.Information to the citizens about no manipulation of bats.An Action Plan has been approved, and includes risk evaluation, surveillance, mechanisms to control and a response protocol with four alert levels.

Additional information

In 2014, a fatal human case was imported from Morocco. The patient was a 46-year-old woman who was bitten by a dog while she was visiting her relatives in Morocco. She visited the hospital in Spain several months after the bite. The diagnosis was performed by the Spanish National Reference Laboratory on 30 April. The strain identified was similar to those circulating in North-Africa. The patient died on 20 May.

3.7.2 Lyssavirus (rabies) in animals

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

Monitoring system

Sampling strategy

Sampling strategy is targeted at 4 levels:1. Apparently healthy terrestrial mammals that injure a person and die into the quarantine (kept under observation) period of 14 days or if the animal is suspected to be rabid (euthanasia).Samples are taken by competent authority. Passive surveillance2.Dogs and cats imported from third countries not included in part 1 and 2 of Annex II of Council Regulation(EC) No 577/2013 need a neutralising antibody titration at least equal to 0,5 IU/ml carried out in an approved laboratory to enter into Spain according to Council Regulation (EC) No 576/20133.Dogs and cats that are going to travel to United Kingdom, Ireland, Sweeden, Norwey and Malta.Samples are taken by private clinics and analisys performed by an approved laboratory 4. Studies including active surveillance of LB in bats

Frequency of the sampling

Indeterminated

Type of specimen taken

Brain, Blood, Saliva

Methods of sampling (description of sampling techniques)

Brain of dead or sacrified animals have to be sent to National Reference Laboratory following a protocol of sending.The sample has to be taken with sterility, be submerged in salinum serum and glicerine in 50% solution and envoided refrigerated quickly. Blood and serum(0,5 ml minimun) have to be sent following a protocol, by a quick transport service refrigerated or frozen.

Case definition

According to Decision No. 2119/98/EC of the European Parliament and of the Council, Commission Decision 2002/253/EC and Commission Decision 2002/543/EC

Diagnostic/analytical methods used

Fluorescent Antibody Test (FAT), Polymerase Chain Reaction followed by DNA sequencing genomic areas, ELISA

Vaccination policy

Compulsory vaccination of dogs in 12 regions, Ceuta and Melilla.Voluntary vaccination of dogs in 5 regions.

Other preventive measures than vaccination in place

Control of animals coming from third countries not included in part 1 and 2 of Annex II of Council Regulation(EC) No 577/2013 Identification and registration of dogs.Pick up of stray dogs by council town authorities.

Control program/mechanisms

The control program/strategies in place

Several regional prevention programmes.Control of imports and exports according to Council Regulation(EC) No 576/2013 and Regulation(EC) No 577/2013

Recent actions taken to control the zoonoses

Imports of third countries not included in part 1 and 2 of Annex II of Council Regulation(EC) No 577/2013 An Action Plan has been approved in 2010, and includes risk evaluation, surveillance, mechanisms to control and a response protocol with four alert levels.

Measures in case of the positive findings or single cases

Spanish National Contingency Plan against rabies.

Notification system in place

Since 1952, at least, by Epizootic Law.At the moment by Animal Health Law 8/2003.

Results of the investigation

Investigations of the human contacts with positive cases

All the people bitten by a suspected animal are investigated following the protocol " Rules of procedures in case of animal aggressions", published in 2012 (Spanish Contingency Plan). According to the epidemiological situation and the type of contact with the suspected animal, the decision about the application of complete treatment (vaccine and Ig) is taken.

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

High

Additional information

In 2013 was updated the protocol " Rules of procedures in case of animal aggressions", that includes risk assessment, actions to be taken after a risk exposition and treatment after a risk exposition and the "Action Plan for rabies in animals" that includes risk evaluation, surveillance, mechanisms to control and a response protocol with four alert levels.

3.8 Q-FEVER

3.8.1 General evaluation of the national situation

3.8.1.1 Coxiella (Q-fever) - general evaluation

History of the disease and/or infection in the country

Q fever is a zoonosis with widely extended in the world.

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

Q fever cases and outbreak in Spain are reported to the National Epidemiological Surveillance Network. Q fever was a notifiable disease in some Spanish regions, since 2015 it is a mandatory disease in all the Spanish regions.

3.9 TOXOPLASMA

3.9.1 General evaluation of the national situation

3.9.1.1 Toxoplasma - general evaluation

History of the disease and/or infection in the country

Toxoplasmosis in production animals has been associated classically to the production of miscarriage.The main source of infection is linked to the contamination of feed by cat faeces, although the use of dung in pasture natural fertilitation has to be considered as an important source of infection for adults.For humans, there are two main sources of infection: contact with cats and comsumption of vegetables, water or animal products, mainly sheep and pig meat.In 60's and 70's studies in some regions of Spain detected prevalences between 12-45% in sheep; between 11- 42% in pig;and between 14-36%in cattle.More recent studies seem prevalences between 30-57% in sheep;between 41-62% in pig;and between 25-43% in cattle.In cats, the incidence founded by private clinics are close to 30%.

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

Main sources of infection for humans are cats and comsumption of meat insufficientment cooked.

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

More studies need to be developed about incidence of congenital toxoplasmosis.

Recent actions taken to control the zoonoses

Surveillance according to Directive 2003/99/ECPrimary prevention of the disease with recommendations to prevent infection during pregnance in humans

3.10 VTEC

3.10.1 General evaluation of the national situation

3.10.1.1 Verotoxigenic E. coli (VTEC) - general evaluation

History of the disease and/or infection in the country

Verotoxigenic Escherichia coli have emerged as foodborne pathogens which can cause severe and potentially fatal illness. Rumiants, specially cattle and sheep, have been implicated as the principal reservoir of VTEC. Transmission happened through consumption of undercooked meat, unpasteurized dairy products, vegetables or water contaminated by rumiant faeces. In 2007-2011 and 2013 national active monitoring programmes have been performed in young cattle 1-2 years old at slaughterhouse under a herd based approach. The next monitoring programme will be implemented in 2015.

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

In cattle, the percentage of animals colonized by strain O157:H7 has been similar in last monitoring programmes.Raw beef products are the main source of infection.Small rumiants may also represent a source of transmision of VTEC to humans.

Recent actions taken to control the zoonoses

Surveillance of the disease according to Directive 2003/99/EEC. National monitoring programmes 2007-2011 and 2013 in young cattle 1-2 years old, and in 2015 in calves under 1 year.Compulsory and voluntary monitoring programmes in raw meat of different species of animals, minced meat and meat products, other animal origin products, vegetables and others products.

Additional information

Diagnostic methods used in food:- Bacteriological method: ISO 16.654:2001.- Method ELISA- PCR-Bax

3.10.2 Escherichia coli in animals

3.10.2.1 Verotoxigenic E. coli (VTEC) in animal - Cattle (bovine animals) - animal sample

Monitoring system

Sampling strategy

Samples have been taken ramdomly (day of sampling each month) in 17 slaughterhouses (distribution of the number of samples according to the capacity of sacrifice of each slaughterhouse) placed in different regions of Spain and representative of the total volume of sacrifice of the country (around 58,5%) in the year 2015.

Type of specimen taken

Animals at slaughter (herd based approach)

hair from the brisket area

Methods of sampling (description of sampling techniques)

Animals at slaughter (herd based approach)

A sample of hair has been taken from one animal in all the slaughter batches in the day of sampling, with a maximun of 30 batches by slaughterhouse and day of sampling

Diagnostic/analytical methods used

Animals at slaughter (herd based approach)

ISO 13.136:2012

Results of the investigation

Number of slaughter batches analyzed: 384Positive : 633 VTEC

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

The monitoring programme will be implemented each 2 years. The, the next monitoring programme will be performed in 2017.

4 ANTIMICROBIAL RESISTANCE INFORMATION ON SPECIFIC ZOONOSES AND ZOONOTIC AGENTS

4.1 SALMONELLOSIS

4.1.1 Salmonella in animals

4.1.1.1 Antimicrobial resistance in Salmonella Cattle (bovine animals)

Sampling strategy used in monitoring

Frequency of the sampling

see text form on Salmonella spp. in bovine animals

Type of specimen taken

see text form on Salmonella spp. in bovine animals

Methods of sampling (description of sampling techniques)

see text form on Salmonella spp. in bovine animals

Laboratory methodology used for identification of the microbial isolates

see text form on Salmonella spp. in bovine animals

Laboratory used for detection for resistance

Antimicrobials included in monitoring

see table on antimicrobial resistance Salmonella in animals

4.1.1.2 Antimicrobial resistance in Salmonella Pigs

Sampling strategy used in monitoring

Frequency of the sampling

There has been a specific monitoring programme for antimicrobial surveillance running from 1999 at national level in Spain. These national active monitoring programme are performed in fattening pigs at slaughterhouse. For more information on the frequency of sampling, please, see text forms on Salmonella in pigs.

Methods of sampling (description of sampling techniques)

See text forms on Salmonella in pigs.

Laboratory methodology used for identification of the microbial isolates

See text forms on Salmonella in pigs.

4.1.1.3 Antimicrobial resistance in Salmonella Poultry, unspecified

Sampling strategy used in monitoring

Frequency of the sampling

The control programme in place in Spain for monitoring of Salmonella spp. Antimicrobial resistance is a National control programme for monitoring AMR according to the Decision 2013/652/EU on the monitoring and reporting of antimicrobial resistance in zoonotic and comensal bacteria. In 2016 they must collect samples from each population of laying hens, broilers and fattening turkeys sampled in the framework of the national control programmes, established in accordance with Article 5(1) of Regulation (EC) No 2160/2003; the are sent to isolate, to identificate and to perform the antibiogram to the National reference Laboratory (Laboratorio Central de Veterinaria- LCV) Periodically through the year to test 170 isolates for antimicrobial susceptibility testing

Type of specimen taken

Laying hens: following point 2.2. of the Annex of Commission Regulation (EC) No 517/2011Broilers: point 2 of the Annex of Commission Regulation (EC) No 200/2012 of 8 March 2012 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Community target for the reduction of the prevalence of Salmonella enteritidis and Salmonella typhimurium in broilers.Turkeys: following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium in turkeys.

Methods of sampling (description of sampling techniques)

Laying hens: following point 2.2. of the Annex of Commission Regulation (EC) No 517/2011.Broilers: point 2 of the Annex of Commission Regulation (EC) No 200/2012 of 8 MArch 2012 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Community target for the reduction of the prevalence of Salmonella enteritidis and Salmonella typhimurium in broilers.Turkeys: following points 1 and 2 of the Annex of Commission Regulation (EC) 584/2008 as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium in turkeys.

Procedures for the selection of isolates for antimicrobial testing

All the strains coming from the official control in the frame of Salmonella National Control Programmes (SNCP) are gathered by the NRL who selects for antimicrobial testing no more than one isolate per salmonella serovar from the same epidemiological unit. After that, in order to reach 170 isolates for each population, a number of strains coming from business operators in the frame of SNCP are selected and requested by the NRL. The selection is made by using an informatics application developed by MAPAMA and taking into account the even distribution of the strains.

Methods used for collecting data

Spain use an informatics application developed by the Ministry of Agriculture and Fisheries, Food an Environment, where the NRL introduce the data, which are sent to the mentioned Ministry and finally they send them to EFSA by the Data Collection Framework.

Laboratory methodology used for identification of the microbial isolates

Isolation and identification according to EN/ISO 6579-2002/Amd 1:2007

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Laboratorio Central de Veterinaria (LCV) de Algete ampicillin, azithromycin, cefotaxim, ceftazidim, chloramphenicol, ciprofloxacin, colistin, gentamicin, meropenem, nalidixic acid, sulfamethoxazole, tetracycline, tigecycline, trimethoprim.

Cut-off values used in testing

The results of antibiotics are interpreted using the epidemiological cut-off values and concentration ranges given in Tables 1, 2 and 3 of Decision 2013/652 / EU to determine the sensitivity of Salmonella spp. and E. coli. Dilutions are performed according to the methods described by the European Committee on Antimicrobial Susceptibility Testing (Eucast) and the Clinical and Laboratory Standards Institute (CLSI), accepted as an international reference method (ISO 20776-1: 2006) .EN 14.11.2013 Official Journal of the European Union L 303/33.

Additional information

The control program/strategies in place Spanish control programmes on Salmonella in breeding flocks of Gallus gallus, laying hens, broilers and turkeys 2016.Spanish Action Plan to combat antimicrobial resistance.

4.2 CAMPYLOBACTERIOSIS

4.2.1 Campylobacter in animals

4.2.1.1 Antimicrobial resistance in Campylobacter spp., unspecified Turkeys

Sampling strategy used in monitoring

Frequency of the sampling

The control programme in place in Spain for monitoring of Campylobacter spp. Antimicrobial resistance is a National control programme for monitoring AMR according to the Decision 2013/652/EU on the monitoring and reporting of antimicrobial resistance in zoonotic and comensal bacteria. In 2016 they must collect caecal samples gathered at slaughter from fattening turkeys, because the production of turkey meat in Spain is more than 10 000 tonnes slaughtered per year. A designated laboratory (Centro de Vigilancia Sanitaria Veterinaria. VISAVET) take samples of caecum of fattening turkeys in slaughterhouses and isolate them, sometimes they also perform the identification. Then, they send the the isolate o the Campylobacter strains to identificate and perform the antibiogram to the National reference Laboratory (Laboratorio Central de Veterinaria- LCV)

Type of specimen taken

According to Commission Implementing Decisions 2013/652/EU and 2013/653/EU and EFSA Technical Specifications.488 samples per year, distributed in weekly samplings throughout the year and the different slaughterhouses throughout the country. Type of samples taken are caecal samples gathered at slaughter from fattening turkeys.

Methods of sampling (description of sampling techniques)

According to Commission Implementing Decisions 2013/652/EU and 2013/653/EU and EFSA Technical Specifications.Sampling is carried out at slaughterhouses processing 100 % of fattening turkeys in Spain, due to the shortage of slaughterhouses in our territory. Sampling is distributed monthly and the day of sampling is selected randomly. Epidemiological unit: the flock

Procedures for the selection of isolates for antimicrobial testing

According to Commission Implementing Decisions 2013/652/EU and 2013/653/EU and EFSA Technical Specifications. Campylobacter jejuni: All the strains isolated have been selected for antimicrobial testing Campylobacter coli: The necessary number of strains to reach 170 isolates, have been selected among the total number of C.coli to get an even distribution over the year.

Methods used for collecting data

According to Commission Implementing Decisions 2013/652/EU and 2013/653/EU and EFSA Technical Specifications. Spain use an informatic application developed by the Ministry of Agriculture and Fisheries, Food an Environment, where the NRL introduce the data, which are sent to the mentioned Ministry and finally they send them to EFSA by the Data Collection Framework.

Laboratory methodology used for identification of the microbial isolates

A sterile swab with the faeces samples is used to inoculate into an agar plate mCCDA (Oxoid). The plates are incubated in microaerophilic at 42 for 48 hours. Identification by PCR

Laboratory used for detection for resistance

Antimicrobials included in monitoring

ampicillin, azithromycin, cefotaxim, ceftazidim, chloramphenicol, ciprofloxacin, colistin, gentamicin, meropenem, nalidixic acid, sulfamethoxazole, tetracycline, tigecycline, trimethoprim.

Cut-off values used in testing

According to Commission Implementing Decisions 2013/652/EU and 2013/653/EU and EFSA Technical Specifications. The results of antibiotics are interpreted using the epidemiological cut-off values and concentration ranges given in Tables 1, 2 and 3 of Decision 2013/652 / EU to determine the sensitivity of Salmonella spp. and E. coli. Dilutions are performed according to the methods described by the European Committee on Antimicrobial Susceptibility Testing (Eucast) and the Clinical and Laboratory Standards Institute (CLSI), accepted as an international reference method (ISO 20776-1: 2006) .EN 14.11.2013 Official Journal of the European Union L 303/33.

Additional information

The Spanish Action Plan which Spain has developped and is put in place to combat antimicrobial resistance.

4.2.1.2 Antimicrobial resistance in Thermophilic Campylobacter spp., unspecified Gallus gallus (fowl)

Sampling strategy used in monitoring

Frequency of the sampling

The control programme in place in Spain for monitoring of Campylobacter spp. Antimicrobial resistance is a National control programme for monitoring AMR according to the Decision 2013/652/EU on the monitoring and reporting of antimicrobial resistance in zoonotic and comensal bacteria. In 2016 they must collect caecal samples gathered at slaughter from broilers because the production of broiler meat in Spain is more than 10 000 tonnes slaughtered per year. A designated laboratory (Centro de Vigilancia Sanitaria Veterinaria. VISAVET) take samples of caecum of broilers in slaughterhouses and isolate them, sometimes they also perform the identification. Then, they send the the isolate o the Campylobacter strains to identificate and perform the antibiogram to the National reference Laboratory (Laboratorio Central de Veterinaria- LCV) 500 samples per year, distributed in weekly samplings throughout the year and the different slaughterhouses throughout the country.

Type of specimen taken

According to the Commission Implementing Decisions 2013/652/EU and 2013/653/EU and Technical specifications, type of samples taken are caecal samples gathered at slaughter from broilers.

Methods of sampling (description of sampling techniques)

Sampling is carried out at slaughterhouses processing 60 % of broilers in Spain, starting with the slaughterhouses of largest throughput. Sampling is distributed monthly and the day of sampling is selected randomly. Epidemiological unit: the flock

Procedures for the selection of isolates for antimicrobial testing

Campylobacter jejuni: All the strains isolated have been selected for antimicrobial testing

Methods used for collecting data

Spain use an informatic application developed by the Ministry of Agriculture and Fisheries, Food an Environment, where the NRL introduce the data, which are sent to the mentioned Ministry and finally they send them to EFSA by the Data Collection Framework.

Laboratory methodology used for identification of the microbial isolates

A sterile swab with the faeces samples is used to inoculate into an agar plate mCCDA (Oxoid). The plates are incubated in microaerophilic at 42 for 48 hours. Identification by PCR

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Laboratorio Central de Veterinaria (LCV) de Algete ampicillin, azithromycin, cefotaxim, ceftazidim, chloramphenicol, ciprofloxacin, colistin, gentamicin, meropenem, nalidixic acid, sulfamethoxazole, tetracycline, tigecycline, trimethoprim.

Cut-off values used in testing

The results of antibiotics are interpreted using the epidemiological cut-off values and concentration ranges given in Tables 1, 2 and 3 of Decision 2013/652 / EU to determine the sensitivity of Salmonella spp. and E. coli. Dilutions are performed according to the methods described by the European Committee on Antimicrobial Susceptibility Testing (Eucast) and the Clinical and Laboratory Standards Institute (CLSI), accepted as an international reference method (ISO 20776-1: 2006) .EN 14.11.2013 Official Journal of the European Union L 303/33.

Additional information

The Spanish Action Plan which Spain has developped and is put in place to combat antimicrobial resistance.

4.3 ESCHERICHIA COLI, NON-PATHOGENIC

4.3.1 Escherichia coli, non-pathogenic in animals

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

Sampling strategy used in monitoring

Frequency of the sampling

The control programme in place in Spain for monitoring of Escherichia coli, non-pathogenic Antimicrobial resistance is a National control programme for monitoring AMR according to the Decision 2013/652/EU on the monitoring and reporting of antimicrobial resistance in zoonotic and comensal bacteria. In 2016 they must collect caecal samples gathered at slaughter from broilers, because the production of broiler meat in Spain is more than 10 000 tonnes slaughtered per year. A designated laboratory (Centro de Vigilancia Sanitaria Veterinaria. VISAVET) take samples of caecum of broilers in slaughterhouses and isolate them, sometimes they also perform the identification. Then, they send the the isolate o the E.coli strains to identificate and perform the antibiogram to the National reference Laboratory (Laboratorio Central de Veterinaria- LCV) 300 samples per year for ESBL-, AmpC- and carbapenemase-producing Escherichia coli and 200 samples per year for indicator commensal E. coli, distributed in weekly samplings throughout the year and the different slaughterhouses throughout the country.

Type of specimen taken

According to the Commission Implementing Decisions 2013/652/EU and 2013/653/EU and Technical specifications, type of samples taken are caecal samples gathered at slaughter from fattening turkeys.

Methods of sampling (description of sampling techniques)

Sampling are proportionally distributed according to the volume of production of each slaughterhouse is carried out at 17 slaughterhouses processing 60 % of broilers in Spain, starting with the slaughterhouses of largest throughput. Sampling is distributed monthly and the day of sampling is selected randomly. Epidemiological unit: the flock

Procedures for the selection of isolates for antimicrobial testing

170 strains were selected among the total number of isolates in order to get a geographical representativeness and even distribution over the year

Methods used for collecting data

Spain use an informatic application developed by the Ministry of Agriculture and Fisheries, Food an Environment, where the NRL introduce the data, which are sent to the mentioned Ministry and finally they send them to EFSA by the Data Collection Framework.

Laboratory methodology used for identification of the microbial isolates

Inoculation of Agar McConkey and incubation at 37C during 18-20h. Identification by PCR

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Laboratorio Central de Veterinaria (LCV) de Algete ampicillin, azithromycin, cefotaxim, ceftazidim, chloramphenicol, ciprofloxacin, colistin, gentamicin, meropenem, nalidixic acid, sulfamethoxazole, tetracycline, tigecycline, trimethoprim

Cut-off values used in testing

The results of antibiotics are interpreted using the epidemiological cut-off values and concentration ranges given in Tables 1, 2 and 3 of Decision 2013/652 / EU to determine the sensitivity of Salmonella spp. and E. coli. Dilutions are performed according to the methods described by the European Committee on Antimicrobial Susceptibility Testing (Eucast) and the Clinical and Laboratory Standards Institute (CLSI), accepted as an international reference method (ISO 20776-1: 2006) .EN 14.11.2013 Official Journal of the European Union L 303/33.

Additional information

The Spanish Action Plan which Spain has developped and is put in place to combat antimicrobial resistance.

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

Sampling strategy used in monitoring

Frequency of the sampling

The control programme in place in Spain for monitoring of Escherichia coli, non-pathogenic Antimicrobial resistance is a National control programme, mandatory for the regional Authorities to take samples and voluntary for food business operators. In 2016 they must collect samples of fresh meat from broilers taken at retail and sent them to the National reference Laboratory (Centro Nacional de Alimentacin-CNA) to isolate the ESBL or AmpC or carbapenemase-producing E.coli for monitoring AMR according to the Decision 2013/652/EU on the monitoring and reporting of antimicrobial resistance in zoonotic and comensal bacteria. The activities are made pursuant to Regulation (EC) no 178/2002. (i.e. rapid alert system, traceability of food, feed, food-producing animals and all substances incorporated into foodstuffs must be established at all stages of production, processing and distribution. To this end, business operators are required to apply appropriate systems and procedures. 300 samples per year, distributed in weekly samplings throughout the year and the different regions throughout the country.

Type of specimen taken

According to the Commission Implementing Decisions 2013/652/EU and 2013/653/EU and Technical specifications, type of samples taken are fresh broiler meat.

Methods of sampling (description of sampling techniques)

Samples are taken randomly at retail. Population stratum (nuts-3 area): provincial level. It is carried out in the provinces (nuts) that cover at least 80% of the national population. Distribution of samples: Samples are proportionally distributed among the 25 most populated provinces (total more than 80% of the population of Spain) belonging to 13 Autonomous Communities. Predominant establishment category: establishments which supplies at least 80% of the market for these products. In this case it is the supermarket. Epidemiological unit: product batch. It can be taken up to 5 different lots of the same product in one visit to the establishment. The competent Authorities of the Autonomous Communities take samples of fresh broiler meat in retail trade and the CNA (NRL) isolates E. coli strains and performs the antibiogram.

Procedures for the selection of isolates for antimicrobial testing

Inoculate one loop-full (10 l loop) of the overnight culture (BPW) by applying a single streak onto a MacConkey agar plate containing 1 mg/L cefotaxime (CTX). Reference PROTOCOL for selective isolation of presumptive ESBL-, AmpC- and carbapenemase-producing Escherichia coli from meat and caecal samples (matrix EQAS) Version 4 (2017).

Methods used for collecting data

Spain use an informatic application developed by the Ministry of Agriculture and Fisheries, Food an Environment, where the NRL introduce the data, which are sent to the mentioned Ministry and finally they send them to EFSA by the Data Collection Framework.

Laboratory methodology used for identification of the microbial isolates

EURL-AR (National Food Institute of Denmark) PROTOCOL for selective isolation of presumptive ESBL-, AmpC- and carbapenemase-producing Escherichia coli from meat and caecal samples (matrix EQAS) Version 4 (2017).

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL, Centro Nacional de Alimentacin (CNA). ampicillin, azithromycin, cefotaxim, ceftazidim, chloramphenicol, ciprofloxacin, colistin, gentamicin, meropenem, nalidixic acid, sulfamethoxazole, tetracycline, tigecycline, trimethoprim.

Cut-off values used in testing

The results of antibiotics are interpreted using the epidemiological cut-off values and concentration ranges given in Tables 1, 2 and 3 of Decision 2013/652 / EU to determine the sensitivity of Salmonella spp. and E. coli. Dilutions are performed according to the methods described by the European Committee on Antimicrobial Susceptibility Testing (Eucast) and the Clinical and Laboratory Standards Institute (CLSI), accepted as an international reference method (ISO 20776-1: 2006) .EN 14.11.2013 Official Journal of the European Union L 303/33.

Additional information

The Spanish Action Plan which Spain has developped and is put in place to combat antimicrobial resistance

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

Sampling strategy used in monitoring

Frequency of the sampling

The control programme in place in Spain for monitoring of Escherichia coli, non-pathogenic Antimicrobial resistance is a National control programme for monitoring AMR according to the Decision 2013/652/EU on the monitoring and reporting of antimicrobial resistance in zoonotic and comensal bacteria. In 2016 they must collect caecal samples gathered at slaughter from fattening turkeys, because the production of turkey meat in Spain is more than 10 000 tonnes slaughtered per year. A designated laboratory (Centro de Vigilancia Sanitaria Veterinaria. VISAVET) take samples of caecum of fattening turkeys in slaughterhouses and isolate them, sometimes they also perform the identification. Then, they send the the isolate o the E.coli strains to identificate and perform the antibiogram to the National reference Laboratory (Laboratorio Central de Veterinaria- LCV) 300 samples per year for ESBL-, AmpC- and carbapenemase-producing Escherichia coli and 200 samples per year for indicator commensal E. coli, distributed in weekly samplings throughout the year and the different slaughterhouses throughout the country.

Type of specimen taken

According to the Commission Implementing Decisions 2013/652/EU and 2013/653/EU and Technical specifications, type of samples taken are caecal samples gathered at slaughter from fattening turkeys.

Methods of sampling (description of sampling techniques)

Sampling is carried out at slaughterhouses processing 100 % of fattening turkeys in Spain, due to the shortage of slaughterhouses in our territory. Sampling is distributed monthly and the day of sampling is selected randomly Epidemiological unit: the flock

Procedures for the selection of isolates for antimicrobial testing

170 strains were selected among the total number of isolates in order to get a geographical representativeness and even distribution over the year.

Methods used for collecting data

Spain use an informatic application developed by the Ministry of Agriculture and Fisheries, Food an Environment, where the NRL introduce the data, which are sent to the mentioned Ministry and finally they send them to EFSA by the Data Collection Framework.

Laboratory methodology used for identification of the microbial isolates

Inoculation of Agar McConkey and incubation at 37C during 18-20h. Identification by PCR

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NRL, Laboratorio Central de Veterinaria de ALgete (LCV). ampicillin, azithromycin, cefotaxim, ceftazidim, chloramphenicol, ciprofloxacin, colistin, gentamicin, meropenem, nalidixic acid, sulfamethoxazole, tetracycline, tigecycline, trimethoprim

Cut-off values used in testing

The results of antibiotics are interpreted using the epidemiological cut-off values and concentration ranges given in Tables 1, 2 and 3 of Decision 2013/652 / EU to determine the sensitivity of Salmonella spp. and E. coli. Dilutions are performed according to the methods described by the European Committee on Antimicrobial Susceptibility Testing (Eucast) and the Clinical and Laboratory Standards Institute (CLSI), accepted as an international reference method (ISO 20776-1: 2006) .EN 14.11.2013 Official Journal of the European Union L 303/33.

Additional information

The Spanish Action Plan which Spain has developped and is put in place to combat antimicrobial resistance.

5 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.

5.1 Outbreaks

5.1.1 Foodborne outbreaks

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

The National Epidemiological Surveillance Network was created by Royal Decree 2210/1995, December 25th,. The outbreak system is a basic system within this Network. The reporting of a summary of every outbreak is mandatory for all practitioners, both those in the public health service and in private practice. All the outbreaks must be reported immediately at the regional level. At national level it is mandatory to report immediately only those outbreaks which, by law, are defined as being supra-regional (considered to be of national interest) in order to facilitate their rapid control, whereas the rest of the outbreaks has to be quarterly reported.

Description of the types of outbreaks covered by the reporting:

Spanish System covers all type of outbreaks (household, general and international outbreaks) and due to any agent (infectious, toxins)

National evaluation of the reported outbreaks in the country:

Trends in numbers of outbreaks and numbers of human cases involved

In 2015 a total of 503 food-borne outbreaks (producing 5,430 cases) have been reported to the National Epidemiological Surveillance Network in Spain.

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

Salmonella is the agent more frequently involved in foodborne outbreak. The most frequent food item mentioned was eggs and eggs products

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

Information about places of food production and preparation is not available. In general outbreaks the place of consumption of the food was, mainly, Restaurant or Cafe or Pub or Bar or Hotel or Catering service. The most frequently mentioned contributor factor is the inadequate chilling.

Control measures or other actions taken to improve the situation

Outbreak investigations as well as necessary control measures are carried out by the health authorities of the autonomous regions. The most frequently mentioned control measures are food establishment inspection and food safety education.

Table Susceptible animal population

Animal species	Category of animals	Population	
		holding	animal
Cattle (bovine animals)	Cattle (bovine animals)	124,650	5,351,930
	Cattle (bovine animals) - calves (under 1 year)	21,637	2,351,478
	Cattle (bovine animals) - dairy cows and heifers	16,550	848,456
	Cattle (bovine animals) - meat production animals	86,463	5,151,996
Ducks	Ducks - breeding flocks, unspecified	97	235,884
Gallus gallus (fowl)	Gallus gallus (fowl) - breeding flocks, unspecified	470	7,891,167
	Gallus gallus (fowl) - broilers	4,970	276,494,621
	Gallus gallus (fowl) - grandparent breeding flocks, unspecified - unspecified	40	18,981,044
	Gallus gallus (fowl) - laying hens	1,272	49,320,793
	Gallus gallus (fowl) - parent breeding flocks, unspecified - unspecified	385	28,874,670
Geese	Geese - breeding flocks, unspecified	16	6,355
Goats	Goats	59,469	5,300,072
Pigs	Pigs	68,523	28,453,852
	Pigs - breeding animals	4,911	4,356,985
	Pigs - breeding animals - unspecified - sows and boars	341	2,205,430
	Pigs - fattening pigs	50,457	18,602,045
	Pigs - mixed herds	12,814	3,289,392
Sheep	Sheep	103,683	29,356,230
Solipeds, domestic	Solipeds, domestic - horses	187,154	720,721
Turkeys	Turkeys - breeding flocks, unspecified	59	113,708
	Turkeys - meat production flocks	740	6,813,141

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

Region	Total number of animals	Number of animals to be tested under the program	Number of animals tested	Number of animals tested individually	Number of positive animals	Number of positive animals slaughtered	Total number of animals slaughtered
SPAIN	6,283,740	4,509,286	3,675,255	3,657,821	151	198	2,289
Galicia	961,263	684,169	679,342	679,342	0	0	3
Principado de Asturias	386,326	287,626	287,626	287,626	0	0	1
Cantabria (NUTS level 2)	269,974	229,857	229,857	229,857	49	49	1,438
País Vasco	135,737	91,548	91,548	87,442	0	0	0
Comunidad Foral de Navarra	115,880	71,551	71,551	71,551	0	0	0
La Rioja (NUTS level 2)	40,196	19,276	19,276	19,276	0	0	0
Aragón	328,331	77,918	77,473	77,190	0	3	3
Comunidad de Madrid (NUTS level 2)	83,097	56,908	56,908	56,908	0	0	1
Castilla y León	1,269,567	1,263,873	810,844	810,844	0	0	144
Castilla-La Mancha	436,878	171,170	170,872	170,872	0	0	133
Extremadura	944,342	603,625	573,346	571,571	42	86	86
Cataluña	611,676	452,090	202,302	201,505	0	0	1
Comunidad Valenciana	54,532	54,185	27,388	27,388	0	0	0
Illes Balears	28,471	11,776	11,776	1,303	0	0	0
Andalucía	521,144	419,668	351,100	351,100	60	60	479
Región de Murcia	76,845	10,322	10,322	10,322	0	0	0
Canarias (NUTS level 2)	19,481	3,724	3,724	3,724	0	0	0

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

Region	Number of new positive herds	Number of depopulated herds	Total number of herds	Number of herds under the program	Number of herds under the program tested/checked	Number of positive herds
SPAIN	23	22	117,484	115,404	104,698	26
Galicia	0	0	37,932	37,926	31,538	0
Principado de Asturias	0	0	16,503	16,503	16,503	0
Cantabria (NUTS level 2)	14	12	7,189	7,125	7,125	14
País Vasco	0	0	5,465	5,465	4,478	0
Comunidad Foral de Navarra	0	0	1,569	1,569	1,568	0
La Rioja (NUTS level 2)	0	0	319	319	319	0
Aragón	0	0	3,072	3,026	3,007	0
Comunidad de Madrid (NUTS level 2)	0	0	1,410	1,410	1,410	0
Castilla y León	0	0	15,387	14,650	14,650	0
Castilla-La Mancha	0	0	3,168	3,168	2,309	0
Extremadura	1	1	10,907	9,844	9,621	4
Cataluña	0	0	4,999	4,999	4,968	0
Comunidad Valenciana	0	0	621	601	473	0
Illes Balears	0	0	570	570	223	0
Andalucía	8	9	7,138	6,994	6,061	8
Región de Murcia	0	0	339	339	76	0
Canarias (NUTS level 2)	0	0	896	896	369	0

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

Region	Number of herds with unknown status, at the end of the period	Number of animals with unknown status, at the end of the period	Number of herds with status not free or not officially free and last check positive, at the end of the period	Number of animals with status not free or not officially free and last check positive, at the end of the period	Number of herds with status not free or not officially free and last check negative, at the end of the period	Number of animals with status not free or not officially free and last check negative, at the end of the period	Number of herds with status free or officially free suspended, at the end of the period	Number of animals with status free or officially free suspended, at the end of the period	Number of herds with status free, at the end of the period	Number of animals with status free, at the end of the period	Number of herds with status officially free, at the end of the period	Number of animals with status officially free, at the end of the period
SPAIN	4	41	8	1,402	354	16,504	84	6,804	274	23,104	112,496	5,999,963
Galicia	0	0	0	0	18	190	0	0	0	0	35,905	947,247
Principado de Asturias	0	0	0	0	133	873	10	370	0	0	16,559	386,382
Cantabria (NUTS level 2)	0	0	2	161	1	80	8	571	0	0	7,114	229,045
País Vasco	0	0	0	0	0	0	0	0	0	0	5,465	124,256
Comunidad Foral de Navarra	0	0	0	0	0	0	1	50	0	0	1,568	71,501
La Rioja (NUTS level 2)	0	0	0	0	0	0	0	0	0	0	319	40,196
Aragón	0	0	0	0	0	0	19	2,872	0	0	3,007	325,459
Comunidad de Madrid (NUTS level 2)	0	0	0	0	0	0	0	0	0	0	1,410	56,908
Castilla y León	4	41	5	854	78	3,483	0	0	259	19,552	14,304	1,239,943
Castilla-La Mancha	0	0	0	0	0	0	0	0	0	0	3,168	436,878
Extremadura	0	0	1	387	124	11,878	14	2,098	15	3,552	9,352	854,509
Cataluña	0	0	0	0	0	0	32	843	0	0	4,942	591,796
Comunidad Valenciana	0	0	0	0	0	0	0	0	0	0	586	52,037
Illes Balears	0	0	0	0	0	0	0	0	0	0	570	28,471
Andalucía	0	0	0	0	0	0	0	0	0	0	6,992	519,009
Región de Murcia	0	0	0	0	0	0	0	0	0	0	339	76,845
Canarias (NUTS level 2)	0	0	0	0	0	0	0	0	0	0	896	19,481

Table Ovine or Caprine brucellosis - data on animals - Community co-financed eradication programmes

Region	Total number of animals	Number of animals to be tested under the program	Number of animals tested	Number of animals tested individually	Number of positive animals	Number of positive animals slaughtered	Total number of animals slaughtered
SPAIN	18,382,483	12,203,374	7,500,645	6,010,463	824	868	5,347
Galicia	236,177	83,480	76,367	76,367	18	18	445
Principado de Asturias	94,538	9,649	9,649	9,649	0	0	0
Cantabria (NUTS level 2)	88,042	18,281	18,281	18,281	0	0	4
País Vasco	264,477	83,041	83,041	83,041	0	0	0
Comunidad Foral de Navarra	513,972	95,400	95,400	31,245	0	1	1
La Rioja (NUTS level 2)	105,739	38,538	38,538	13,060	0	0	0
Aragón	1,387,839	627,461	627,461	627,461	0	7	7
Comunidad de Madrid (NUTS level 2)	94,734	94,671	94,671	94,671	0	0	7
Castilla y León	3,217,394	3,217,394	396,432	396,432	57	57	208
Castilla-La Mancha	3,001,706	3,001,706	1,215,154	1,215,154	180	180	978
Extremadura	3,696,780	559,254	559,254	559,254	0	39	39
Cataluña	463,972	463,914	463,139	231,594	17	17	375
Comunidad Valenciana	393,054	393,054	371,033	191,139	0	0	11
Illes Balears	311,392	50,060	50,060	24,073	0	0	0
Andalucía	3,364,986	2,523,557	2,465,686	2,179,654	511	511	3,234
Región de Murcia	893,047	715,615	708,180	223,655	41	38	38
Canarias (NUTS level 2)	254,634	228,299	228,299	35,733	0	0	0

Table Ovine or Caprine brucellosis - data on herds - Community co-financed eradication programmes

Region	Number of new positive herds	Number of depopulated herds	Total number of herds	Number of herds under the program	Number of herds under the program tested/checked	Number of positive herds
SPAIN	38	11	123,739	120,372	60,241	51
Galicia	1	1	20,791	20,791	6,268	1
Principado de Asturias	0	0	8,413	8,413	1,100	0
Cantabria (NUTS level 2)	0	0	9,592	9,592	286	0
País Vasco	0	0	10,277	10,277	5,094	0
Comunidad Foral de Navarra	0	0	2,462	2,462	559	0
La Rioja (NUTS level 2)	0	0	411	407	136	0
Aragón	0	0	3,592	3,552	3,513	0
Comunidad de Madrid (NUTS level 2)	0	0	678	672	672	0
Castilla y León	1	1	11,268	11,268	2,746	1
Castilla-La Mancha	6	3	6,532	6,532	6,286	6
Extremadura	0	0	17,714	14,475	8,131	0
Cataluña	0	1	3,575	3,575	3,562	1
Comunidad Valenciana	0	0	1,414	1,414	1,362	0
Illes Balears	0	0	4,125	4,125	825	0
Andalucía	30	5	19,051	18,999	17,418	42
Región de Murcia	0	0	1,903	1,877	1,776	0
Canarias (NUTS level 2)	0	0	1,941	1,941	507	0

Table Ovine or Caprine brucellosis - data on status of herds at the end of the period - Community co-financed eradication programmes

Region	Number of herds with unknown status, at the end of the period	Number of animals with unknown status, at the end of the period	Number of herds with status not free or not officially free and last check positive, at the end of the period	Number of animals with status not free or not officially free and last check positive, at the end of the period	Number of herds with status not free or not officially free and last check negative, at the end of the period	Number of animals with status not free or not officially free and last check negative, at the end of the period	Number of herds with status free or officially free suspended, at the end of the period	Number of animals with status free or officially free suspended, at the end of the period	Number of herds with status free, at the end of the period	Number of animals with status free, at the end of the period	Number of herds with status officially free, at the end of the period	Number of animals with status officially free, at the end of the period
SPAIN	251	9,726	49	28,724	1,003	83,913	158	26,613	11,307	2,678,919	105,298	14,545,627
Galicia	0	0	0	0	0	0	0	0	0	0	19,983	217,059
Principado de Asturias	0	0	0	0	0	0	0	0	0	0	8,413	94,538
Cantabria (NUTS level 2)	0	0	0	0	0	0	0	0	0	0	9,592	88,042
País Vasco	0	0	0	0	0	0	0	0	0	0	10,277	264,477
Comunidad Foral de Navarra	0	0	0	0	0	0	0	0	0	0	2,462	513,972
La Rioja (NUTS level 2)	0	0	0	0	0	0	1	51	0	0	406	105,347
Aragón	0	0	0	0	0	0	69	291	0	0	3,445	627,461
Comunidad de Madrid (NUTS level 2)	0	0	0	0	64	2,380	0	0	0	0	608	92,291
Castilla y León	0	0	0	0	0	0	0	0	0	0	11,268	3,217,394
Castilla-La Mancha	9	776	5	4,119	101	12,036	39	3,598	859	343,806	5,521	2,637,371
Extremadura	0	0	0	0	0	0	0	0	0	0	14,256	3,659,611
Cataluña	0	0	0	0	0	0	13	775	0	0	3,489	464,192
Comunidad Valenciana	0	0	0	0	12	508	0	0	3	64	1,387	386,113
Illes Balears	0	0	0	0	0	0	0	0	0	0	4,125	311,392
Andalucía	242	8,950	44	24,605	718	53,584	27	15,164	8,993	1,766,073	7,864	1,470,922
Región de Murcia	0	0	0	0	108	15,405	9	6,734	1,452	568,976	261	146,072
Canarias (NUTS level 2)	0	0	0	0	0	0	0	0	0	0	1,941	249,373

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

Region	Total number of animals	Number of animals to be tested under the program	Number of animals tested	Number of animals tested individually	Number of positive animals	Number of positive animals slaughtered	Total number of animals slaughtered
SPAIN	6,343,285	5,285,663	5,128,473	5,072,740	26,218	27,675	35,345
Galicia	961,263	914,197	829,696	829,696	40	39	1,287
Principado de Asturias	386,326	368,260	368,260	368,260	790	790	1,150
Cantabria (NUTS level 2)	269,974	267,086	267,086	267,086	1,891	1,891	2,431
País Vasco	135,737	108,461	108,461	108,461	19	27	107
Comunidad Foral de Navarra	115,880	97,025	97,025	97,025	88	187	187
La Rioja (NUTS level 2)	40,196	33,131	33,131	33,131	278	278	278
Aragón	332,731	141,689	138,709	138,709	352	376	378
Comunidad de Madrid (NUTS level 2)	83,097	80,212	80,212	80,212	288	288	314
Castilla y León	1,269,567	1,097,053	1,097,053	1,097,053	1,542	1,507	6,017
Castilla-La Mancha	437,105	300,277	300,158	300,158	2,039	2,039	2,181
Extremadura	944,342	844,442	813,694	813,694	6,443	7,805	7,835
Cataluña	611,676	325,972	310,249	254,516	180	180	276
Comunidad Valenciana	54,532	52,290	37,210	37,210	227	227	240
Illes Balears	28,471	22,931	22,931	22,931	0	0	25
Andalucía	576,062	562,852	556,556	556,556	11,980	11,980	12,578
Región de Murcia	76,845	50,304	49,888	49,888	61	61	61
Canarias (NUTS level 2)	19,481	19,481	18,154	18,154	0	0	0

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

Region	Number of new positive herds	Number of depopulated herds	Total number of herds	Number of herds under the program	Number of herds under the program tested/checked	Number of positive herds
SPAIN	1,693	68	117,579	114,178	106,304	3,048
Galicia	14	10	37,932	37,926	31,862	17
Principado de Asturias	24	10	16,503	16,055	16,055	27
Cantabria (NUTS level 2)	46	2	7,189	7,125	7,125	59
País Vasco	5	0	5,465	5,465	4,744	8
Comunidad Foral de Navarra	8	0	1,569	1,569	1,568	10
La Rioja (NUTS level 2)	10	0	319	285	285	11
Aragón	13	2	3,072	3,018	3,000	22
Comunidad de Madrid (NUTS level 2)	18	1	1,410	1,349	1,349	41
Castilla y León	220	23	15,387	14,650	14,650	274
Castilla-La Mancha	94	2	3,169	2,433	2,359	185
Extremadura	638	3	10,907	9,804	9,786	1,268

Region	Number of new positive herds	Number of depopulated herds	Total number of herds	Number of herds under the program	Number of herds under the program tested/checked	Number of positive herds
Cataluña	8	3	4,999	4,986	4,967	15
Comunidad Valenciana	9	0	621	594	503	10
Illes Balears	0	0	570	570	459	0
Andalucía	578	12	7,232	7,114	6,386	1,092
Región de Murcia	8	0	339	339	310	9
Canarias (NUTS level 2)	0	0	896	896	896	0

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

Region	Number of herds with unknown status, at the end of the period	Number of animals with unknown status, at the end of the period	Number of herds with status not free or not officially free and last check positive, at the end of the period	Number of animals with status not free or not officially free and last check positive, at the end of the period	Number of herds with status not free or not officially free and last check negative, at the end of the period	Number of animals with status not free or not officially free and last check negative, at the end of the period	Number of herds with status free or officially free suspended, at the end of the period	Number of animals with status free or officially free suspended, at the end of the period	Number of herds with status free, at the end of the period	Number of animals with status free, at the end of the period	Number of herds with status officially free, at the end of the period	Number of animals with status officially free, at the end of the period
SPAIN	90	5,498	1,143	147,926	2,004	197,406	1,230	143,839	0	0	107,404	6,372,970
Galicia	11	493	4	43	1	7	20	1,516	0	0	35,887	945,378
Principado de Asturias	0	0	2	2	220	1,206	79	3,496	0	0	16,129	387,466
Cantabria (NUTS level 2)	0	0	24	1,461	7	361	129	7,500	0	0	6,965	257,764
País Vasco	0	0	1	70	1	78	1	35	0	0	5,462	134,235
Comunidad Foral de Navarra	0	0	4	1,127	0	0	2	210	0	0	1,563	1,125,351
La Rioja (NUTS level 2)	0	0	6	1,269	4	915	0	0	0	0	275	30,947
Aragón	0	0	22	2,955	0	0	18	1,701	0	0	2,978	328,075
Comunidad de Madrid (NUTS level 2)	0	0	22	1,866	22	2,160	0	0	0	0	1,305	73,186
Castilla y León	10	1,371	460	64,515	441	48,929	0	0	0	0	13,739	982,238
Castilla-La Mancha	0	0	117	17,620	91	11,150	31	3,944	0	0	2,193	283,365
Extremadura	1	57	1	94	534	67,917	779	109,258	0	0	8,214	688,474
Cataluña	15	1,068	1	30	1	2	67	7,485	0	0	4,887	583,269
Comunidad Valenciana	1	9	0	0	0	0	44	4,406	0	0	533	45,332
Illes Balears	0	0	0	0	0	0	11	479	0	0	559	27,992
Andalucía	45	2,084	479	56,874	681	63,646	49	3,809	0	0	5,488	385,023
Región de Murcia	7	416	0	0	1	1,035	0	0	0	0	331	75,394
Canarias (NUTS level 2)	0	0	0	0	0	0	0	0	0	0	896	19,481

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
SPAIN	Deer - wild - fallow deer - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	82	0	Brucella	0
	Deer - wild - red deer - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	527	0	Brucella	0
	Deer - wild - roe deer - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	92	0	Brucella	0
	Mouflons - wild - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	130	0	Brucella	0
	Pigs - Farm - Spain - animal sample - Monitoring - active - Official sampling - Selective sampling	animal	3998	0	Brucella	0
	Wild boars - wild - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	2429	151	Brucella suis - biovar 2	151

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
SPAIN	Gallus gallus (fowl) - broilers - Slaughterhouse - Spain - animal sample - caecum - Monitoring - EFSA specifications - Official sampling - Objective sampling	slaughter animal batch	500	256	Campylobacter coli	93
					Campylobacter jejuni	162
					Campylobacter, unspecified sp.	1
	Turkeys - fattening flocks - Slaughterhouse - Spain - animal sample - caecum - Monitoring - EFSA specifications - Official sampling - Objective sampling	slaughter animal batch	488	319	Campylobacter coli	230
					Campylobacter jejuni	88
					Campylobacter, unspecified sp.	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	Cheeses, made from unspecified milk or other animal milk - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	9	0	Campylobacter	0
	Cheeses, made from unspecified milk or other animal milk - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	5	0	Campylobacter	0
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	3	1	Campylobacter	0
	Meat from broilers (Gallus gallus) - fresh - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	2	Campylobacter	0
	Meat from broilers (Gallus gallus) - fresh - Slaughterhouse - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	0	Campylobacter	0
	Meat from other poultry species - fresh - chilled - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	49	9	Campylobacter	9
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	51	0	Campylobacter	0
Asturias	Meat from broilers (Gallus gallus) - fresh - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	100	79	Campylobacter coli	20
							Campylobacter jejuni	71

Table CHLAMYDIA/ CHLAMYDOPHILA 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
Asturias	Gallus gallus (fowl) - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	1856	0	Chlamydia/ Chlamydophila	0

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
SPAIN	Cattle (bovine animals) - dairy cows - adult - Farm - Spain - animal sample - Monitoring - passive - Official sampling - Suspect sampling	animal	1364	68			Coxiella	68
	Goats - Farm - Spain - animal sample - Monitoring - passive - Official sampling - Suspect sampling	animal	466	60			Coxiella	60
	Sheep - Farm - Spain - animal sample - Monitoring - passive - Official sampling - Suspect sampling	animal	2889	517			Coxiella	517

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
Asturias	Foodstuffs intended for special nutritional uses - other food for infants and children - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	60	0	Cronobacter	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
Asturias	Cattle (bovine animals) - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	56802	10	Cysticercus	10
	Pigs - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	79997	0	Cysticercus	0

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) - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	163674	338	Echinococcus granulosus	0
	Goats - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	117075	947	Echinococcus granulosus	0
	Pigs - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	4518536	145	Echinococcus granulosus	0
	Pigs - Unspecified - Not Available - Not Available - Surveillance - Official sampling - Not specified	animal	2170	9	Echinococcus granulosus	0
	Sheep - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	1403762	26251	Echinococcus granulosus	0
Asturias	Cattle (bovine animals) - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	56802	13	Echinococcus	13
	Deer - wild - fallow deer - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	53	0	Echinococcus	0
	Deer - wild - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	36	0	Echinococcus	0
	Goats - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	3781	0	Echinococcus	0
	Mouflons - wild - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	1	0	Echinococcus	0
	Pigs - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	79997	0	Echinococcus	0
	Sheep - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	9805	2	Echinococcus	2
	Solipeds, domestic - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	3968	0	Echinococcus	0
	Wild boars - wild - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	163	0	Echinococcus	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	10	0	Escherichia coli	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	10	0	Verocytotoxigenic E. coli (VTEC)	0
	Meat from other animal species or not specified - meat preparation - intended to be eaten cooked - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	6	0	VTEC O157	0
	Meat from other animal species or not specified - meat preparation - intended to be eaten cooked - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	19	0	VTEC O157	0
	Meat from other animal species or not specified - meat preparation - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	10	0	VTEC O157	0
	Meat from other animal species or not specified - meat preparation - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	2	0	VTEC O157	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	3	0	VTEC O157	0
	Meat from other poultry species - fresh - chilled - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	49	3	Escherichia coli	3
	Meat from other poultry species - fresh - chilled - Retail - Not Available - Not Available - Survey - EU baseline survey - Official sampling - Selective sampling	single (food/feed)	100	Gram	12	12	Escherichia coli	12
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	51	0	Escherichia coli	0
	Meat, mixed meat - meat preparation - intended to be eaten cooked - chilled - Processing plant - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	10	2	VTEC O26	2
	Milk, cows' - extended shelf life milk - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	1	0	VTEC O157	0
	Milk, cows' - extended shelf life milk - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	1	0	VTEC O157	0
	Milk, cows' - pasteurised milk - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	1	0	VTEC O157	0
	Other processed food products and prepared dishes - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	17	0	VTEC O157	0
	Vegetables - products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	1	0	VTEC O157	0
	Vegetables - products - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	5	0	VTEC O157	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
Asturias	Live bivalve molluscs - oysters - depurated - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1000	Gram	1	0	Escherichia coli	0
	Meat from bovine animals and pig - meat preparation - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	45	2	VTEC O157	2

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	Birds - wild - game birds, farmed - Farm - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	15	3	West Nile virus	3
	Birds - wild - game birds, farmed - Farm - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	42	7	West Nile virus	7
	Birds - wild - game birds, farmed - Farm - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	1711	99	West Nile virus	99
	Birds - wild - Natural habitat - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	385	0	Flavivirus	0
	Birds - wild - Natural habitat - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	119	60	West Nile virus	60
	Birds - wild - Natural habitat - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	136	54	West Nile virus	54
	Birds - wild - Natural habitat - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	415	4	West Nile virus	4
	Birds - wild - Natural habitat - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	43	3	West Nile virus	3
	Birds - wild - Natural habitat - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	88	44	West Nile virus	44
	Solipeds, domestic - horses - Farm - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	268	0	Flavivirus	0
	Solipeds, domestic - horses - Farm - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	378	63	West Nile virus	63
	Solipeds, domestic - horses - Farm - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	13	0	Flavivirus	0
	Solipeds, domestic - horses - Farm - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	101	2	West Nile virus	2
	Solipeds, domestic - horses - Farm - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	249	73	West Nile virus	73
	Solipeds, domestic - horses - Farm - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	98	51	West Nile virus	51

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
Asturias	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Conservation facilities - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	18	0	<= 100	Histamine	0	18
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	99	0	<= 100	Histamine	0	99
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	18	0	<= 100	Histamine	0	18
							>100 TO <= 200	Histamine	0	0
							>200	Histamine	0	0

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	Fish - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	0	Listeria monocytogenes, unspecified	0
	Fish - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	3	0	Listeria monocytogenes, unspecified	0
SPAIN	Cattle (bovine animals) - dairy cows - adult - Farm - Spain - animal sample - foetus/stillbirth - Monitoring - passive - Official sampling - Suspect sampling	animal	165	0	Listeria monocytogenes	0
	Rodents - wild - Natural habitat - Spain - animal sample - Monitoring - active - Official sampling - Selective sampling	animal	197	1	Listeria monocytogenes	1
	Sheep - Farm - Spain - animal sample - foetus/stillbirth - Monitoring - passive - Official sampling - Suspect sampling	animal	2	0	Listeria monocytogenes	0
	Sheep - Farm - Spain - animal sample - milk - Monitoring - passive - Official sampling - Suspect sampling	animal	36	3	Listeria monocytogenes	3

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Bakery products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	212	0	<100	Listeria monocytogenes, unspecified	212	0
	Bakery products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	7	0	Not Available	Listeria monocytogenes, unspecified	7	0
	Bakery products - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	16	0	<100	Listeria monocytogenes, unspecified	16	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	10	0	Not Available	Listeria monocytogenes	10	0
	Cheeses, made from unspecified milk or other animal milk - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	54	0	<100	Listeria monocytogenes, unspecified	54	0
	Cheeses, made from unspecified milk or other animal milk - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	28	0	Not Available	Listeria monocytogenes, unspecified	28	0
	Cheeses, made from unspecified milk or other animal milk - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	29	0	<100	Listeria monocytogenes, unspecified	29	0
	Crustaceans - unspecified - cooked - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	14	0	<100	Listeria monocytogenes, unspecified	14	0
	Crustaceans - unspecified - cooked - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	3	0	<100	Listeria monocytogenes, unspecified	3	0
	Crustaceans - unspecified - raw - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	<100	Listeria monocytogenes, unspecified	1	0
	Crustaceans - unspecified - raw - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	5	0	<100	Listeria monocytogenes, unspecified	5	0
	Dairy products (excluding cheeses) - butter - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	<100	Listeria monocytogenes, unspecified	1	0
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	<100	Listeria monocytogenes, unspecified	2	0
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Not Available	Listeria monocytogenes, unspecified	2	0
	Dairy products (excluding cheeses) - fermented dairy products - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	<100	Listeria monocytogenes, unspecified	6	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	35	0	<100	Listeria monocytogenes, unspecified	35	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	9	0	<100	Listeria monocytogenes, unspecified	9	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Egg products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Not Available	Listeria monocytogenes, unspecified	2	0
	Fish - smoked - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	5	0	<100	Listeria monocytogenes, unspecified	5	0
	Fish - smoked - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	10	0	Not Available	Listeria monocytogenes	10	0
	Fruits and vegetables - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	<100	Listeria monocytogenes, unspecified	6	0
	Fruits and vegetables - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	<100	Listeria monocytogenes, unspecified	1	0
	Fruits and vegetables - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Not Available	Listeria monocytogenes, unspecified	2	0
	Fruits and vegetables - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	15	0	<100	Listeria monocytogenes, unspecified	15	0
	Meat from other animal species or not specified - meat preparation - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	3	Not Available	Listeria monocytogenes, unspecified	6	3
	Meat from other animal species or not specified - meat preparation - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	1	Not Available	Listeria monocytogenes, unspecified	1	1
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	18	0	<100	Listeria monocytogenes, unspecified	18	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	Not Available	Listeria monocytogenes, unspecified	6	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	17	0	<100	Listeria monocytogenes, unspecified	17	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	34	0	<100	Listeria monocytogenes, unspecified	34	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	1	Not Available	Listeria monocytogenes, unspecified	6	1
	Meat from other animal species or not specified - meat products - fermented sausages - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	10	0	<100	Listeria monocytogenes, unspecified	10	0
	Meat from pig - meat products - cooked, ready-to-eat - chilled - Processing plant - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	batch (food/feed)	100	Gram	9	1	Not Available	Listeria monocytogenes	9	1
							>100	Listeria monocytogenes	9	1
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	51	0	Not Available	Listeria monocytogenes	51	0
	Milk from other animal species or unspecified - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	Not Available	Listeria monocytogenes, unspecified	6	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Milk from other animal species or unspecified - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	<100	Listeria monocytogenes, unspecified	6	0
	Molluscan shellfish - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	0	<100	Listeria monocytogenes, unspecified	4	0
	Molluscan shellfish - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	13	0	<100	Listeria monocytogenes, unspecified	13	0
	Other processed food products and prepared dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	<100	Listeria monocytogenes, unspecified	1	0
	Other processed food products and prepared dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	22	0	Not Available	Listeria monocytogenes, unspecified	22	0
	Other processed food products and prepared dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	593	0	<100	Listeria monocytogenes, unspecified	593	0
	Other processed food products and prepared dishes - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	41	0	<100	Listeria monocytogenes, unspecified	41	0
	Sauce and dressings - mayonnaise - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Not Available	Listeria monocytogenes, unspecified	2	0
	Vegetables - products - canned - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	<100	Listeria monocytogenes, unspecified	6	0
	Vegetables - products - fruit purée - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	13	0	<100	Listeria monocytogenes, unspecified	7	0
	Vegetables - products - fruit purée - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Not Available	Listeria monocytogenes, unspecified	1	0
Asturias	Bakery products - cakes - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	20	0	Not Available	Listeria monocytogenes	20	0
	Bakery products - cakes - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	30	0	Not Available	Listeria monocytogenes	30	0
	Cheeses, made from mixed milk from cows, sheep and/or goats - unspecified - made from raw or low heat-treated milk - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	50	0	Not Available	Listeria monocytogenes	50	0
	Crustaceans - unspecified - cooked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	20	0	Not Available	Listeria monocytogenes	20	0
	Dairy products (excluding cheeses) - butter - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	35	0	Not Available	Listeria monocytogenes	35	0
	Dairy products (excluding cheeses) - cream - made from pasteurised milk - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	250	Millilitre	10	0	Not Available	Listeria monocytogenes	10	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	35	0	Not Available	Listeria monocytogenes	35	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Asturias	Dairy products (excluding cheeses) - ice-cream - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	5	0	Not Available	Listeria monocytogenes	5	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	15	0	Not Available	Listeria monocytogenes	15	0
	Fish - smoked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	30	2	>100	Listeria monocytogenes	30	2
	Foodstuffs intended for special nutritional uses - other food for infants and children - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	20	0	Not Available	Listeria monocytogenes	20	0
	Meat from pig - meat products - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	100	1	<100	Listeria monocytogenes	100	1
	Meat from pig - meat products - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	100	3	<100	Listeria monocytogenes	100	3
	Milk, cows' - pasteurised milk - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	250	Millilitre	10	0	Not Available	Listeria monocytogenes	10	0
	Milk, cows' - pasteurised milk - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	250	Millilitre	5	0	Not Available	Listeria monocytogenes	5	0
	Molluscan shellfish - cooked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	20	0	Not Available	Listeria monocytogenes	20	0
	Other processed food products and prepared dishes - Hospital or medical care facility - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	80	0	Not Available	Listeria monocytogenes	80	0
	Other processed food products and prepared dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	120	0	Not Available	Listeria monocytogenes	120	0

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
SPAIN	Bats - wild - Natural habitat - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	152	1	European bat lyssavirus 1	1
	Cats - pet animals - Veterinary clinics - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	29	0	Lyssavirus	0
	Dogs - pet animals - Veterinary clinics - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	39	0	Lyssavirus	0
	Ferrets - wild - Natural habitat - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	1	0	Lyssavirus	0
	Foxes - wild - Natural habitat - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	3	0	Lyssavirus	0
	Other animals - wild - Natural habitat - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	4	0	Lyssavirus	0
	Pigs - Farm - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	2	0	Lyssavirus	0
	Rats - wild - Natural habitat - Spain - animal sample - brain - Monitoring - passive - Official sampling - Suspect sampling	animal	11	0	Lyssavirus	0

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) - Slaughterhouse - Not Available - Not Available - Control and eradication programmes - Official sampling - Suspect sampling	animal	25	0	Mycobacterium	0
	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Control and eradication programmes - Official, based on Regulation 854/2004 - Not specified	animal	163674	2269	Mycobacterium	0
	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Suspect sampling	animal	3	0	Mycobacterium	0
	Cattle (bovine animals) - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	163674	66	Mycobacterium	0
	Deer - Game handling estabilishment - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	65969	114	Mycobacterium	0
	Deer - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	2034	85	Mycobacterium	0
	Goats - Slaughterhouse - Not Available - Not Available - Control and eradication programmes - Official sampling - Suspect sampling	animal	1	0	Mycobacterium	0
	Goats - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	117075	178	Mycobacterium	0
	Pigs - Slaughterhouse - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	4518536	8	Mycobacterium	0
	Wild boars - Game handling estabilishment - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	45385	152	Mycobacterium	0
SPAIN	Badgers - wild - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	213	3	Mycobacterium tuberculosis complex (MTC)	3
	Deer - wild - fallow deer - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	94	8	Mycobacterium tuberculosis complex (MTC)	8
	Deer - wild - red deer - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	1048	99	Mycobacterium tuberculosis complex (MTC)	99
	Deer - wild - roe deer - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	65	1	Mycobacterium tuberculosis complex (MTC)	1
	Foxes - wild - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	16	10	Mycobacterium tuberculosis complex (MTC)	10
	Goats - Farm - Spain - animal sample - Monitoring - active - Official sampling - Selective sampling	animal	225331	2854	Mycobacterium tuberculosis complex (MTC)	2,854
	Sheep - Farm - Spain - animal sample - Monitoring - active - Official sampling - Selective sampling	animal	2231	4	Mycobacterium tuberculosis complex (MTC)	4
	Wild boars - wild - Hunting - Spain - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	4364	475	Mycobacterium tuberculosis complex (MTC)	475
Asturias	Cattle (bovine animals) - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	56802	43	Mycobacterium	43
	Deer - wild - fallow deer - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	53	0	Mycobacterium	0
	Deer - wild - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	36	0	Mycobacterium	0
	Gallus gallus (fowl) - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal	1856	0	Mycobacterium	0
	Mouflons - wild - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	1	0	Mycobacterium	0
	Wild boars - wild - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	animal	163	0	Mycobacterium	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Fish - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)		N_A	3	0	Salmonella	0
	Fish - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)		N_A	3	0	Salmonella	0
SPAIN	Gallus gallus (fowl) - breeding flocks for broiler production line - adult - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	1743	Y	1743	47	Salmonella 1,4,5,12:i:-	6
							Salmonella Hadar	2
							Salmonella Infantis	1
							Salmonella Kedougou	8
							Salmonella Mikawasima	11
							Salmonella Other serovars	45
							Salmonella Rissen	3
							Salmonella Typhimurium	5
							Salmonella Virchow	1
	Gallus gallus (fowl) - breeding flocks for broiler production line - during rearing period - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	720	8	Salmonella Hadar	2
							Salmonella Mikawasima	1
							Salmonella Rissen	3
							Salmonella spp., unspecified	3
							Salmonella Toulon	2
	Gallus gallus (fowl) - breeding flocks for egg production line - adult - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	76	Y	76	0	Salmonella	0
	Gallus gallus (fowl) - breeding flocks for egg production line - during rearing period - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	232	3	Salmonella Mikawasima	2
							Salmonella spp., unspecified	2
	Gallus gallus (fowl) - breeding flocks, unspecified - adult - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	1780	37	Salmonella 1,4,5,12:i:-	4
							Salmonella Infantis	1
							Salmonella Kentucky	3
							Salmonella Mikawasima	7
							Salmonella spp., unspecified	36
							Salmonella Typhimurium	5
	Gallus gallus (fowl) - breeding flocks, unspecified - adult - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock		N_A	1423	17	Salmonella 1,4,5,12:i:-	2
							Salmonella Hadar	2
							Salmonella Kentucky	2
							Salmonella Mikawasima	4
							Salmonella spp., unspecified	15
							Salmonella Virchow	1
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	40028	1250	Salmonella 1,4,5,12:i:-	9
							Salmonella Enteritidis	5
							Salmonella spp., unspecified	1,221
							Salmonella Typhimurium	15
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	40076	Y	40076	1277	Salmonella 1,4,5,12:i:-	12
							Salmonella Enteritidis	7
							Salmonella spp., unspecified	1,249
							Salmonella Typhimurium	18

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
SPAIN	Gallus gallus (fowl) - broilers - before slaughter - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock		N_A	475	31	Salmonella 1,4,5,12:i:-	3
							Salmonella Enteritidis	2
							Salmonella spp., unspecified	25
							Salmonella Typhimurium	3
	Gallus gallus (fowl) - laying hens - adult - Farm - Spain - animal sample - faeces - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	2544	134	Salmonella Enteritidis	2
							Salmonella Infantis	15
							Salmonella Kentucky	7
							Salmonella Ohio	21
							Salmonella Other serovars	133
							Salmonella Typhimurium	4
	Gallus gallus (fowl) - laying hens - adult - Farm - Spain - animal sample - faeces - Control and eradication programmes - Official and industry sampling - Census	herd/flock	2637	Y	2637	228	Salmonella 1,4,5,12:i:-	4
							Salmonella Enteritidis	30
							Salmonella Infantis	38
							Salmonella Ohio	40
							Salmonella Other serovars	212
							Salmonella Typhimurium	11
	Gallus gallus (fowl) - laying hens - adult - Farm - Spain - animal sample - faeces - Control and eradication programmes - Official sampling - Census	herd/flock		N_A	787	107	Salmonella 1,4,5,12:i:-	4
							Salmonella Enteritidis	28
							Salmonella Infantis	23
							Salmonella Ohio	19
							Salmonella Other serovars	98
							Salmonella Typhimurium	7
	Gallus gallus (fowl) - laying hens - during rearing period - Farm - Spain - animal sample - faeces - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	1205	24	Salmonella spp., unspecified	24
	Partridges - farmed - Farm - Spain - animal sample - faeces - Monitoring - active - Official sampling - Objective sampling	herd/flock		N_A	67	12	Salmonella Enteritidis	2
							Salmonella spp., unspecified	4
							Salmonella Typhimurium	6
	Pheasants - meat production flocks - Farm - Spain - animal sample - faeces - Monitoring - active - Official sampling - Objective sampling	herd/flock		N_A	3	1	Salmonella spp., unspecified	1
	Quails - meat production flocks - Farm - Spain - animal sample - faeces - Monitoring - active - Official sampling - Objective sampling	herd/flock		N_A	6	0	Salmonella	0
	Turkeys - breeding flocks, unspecified - adult - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	121	2	Salmonella spp., unspecified	2
	Turkeys - breeding flocks, unspecified - adult - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	129	Y	129	2	Salmonella spp., unspecified	2
	Turkeys - breeding flocks, unspecified - adult - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock		N_A	52	0	Salmonella	0
	Turkeys - breeding flocks, unspecified - during rearing period - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	46	0	Salmonella	0
	Turkeys - fattening flocks - before slaughter - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock		N_A	3737	605	Salmonella 1,4,5,12:i:-	5
							Salmonella Kentucky	49
							Salmonella Other serovars	557
							Salmonella Typhimurium	5
	Turkeys - fattening flocks - before slaughter - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	3740	Y	3740	613	Salmonella 1,4,5,12:i:-	7
							Salmonella Kentucky	53
							Salmonella Other serovars	560
							Salmonella Typhimurium	6

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
SPAIN	Turkeys - fattening flocks - before slaughter - Farm - Spain - environmental sample - boot swabs - Control and eradication programmes - Official sampling - Census	herd/flock		N_A	69	12	Salmonella 1,4,5,12:i:-	2
							Salmonella spp., unspecified	9
							Salmonella Typhimurium	1
Asturias	Cattle (bovine animals) - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Objective sampling	slaughter animal batch		N_A	200	2	Salmonella Derby	1
							Salmonella Typhimurium, monophasic	1
	Gallus gallus (fowl) - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	animal		N_A	1856	0	Salmonella	0
	Pigs - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Objective sampling	slaughter animal batch		N_A	100	4	Salmonella Rissen	1
							Salmonella Typhimurium DT 104b	1
							Salmonella Typhimurium RDNC	1
							Salmonella Typhimurium, monophasic	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Bakery products - pastry - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	64	0	Salmonella	0
	Bakery products - pastry - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	18	0	Salmonella	0
	Bakery products - pastry - Unspecified - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	1	Salmonella	0
	Bakery products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	139	0	Salmonella	0
	Bakery products - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	14	0	Salmonella	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	10	0	Salmonella	0
	Cheeses, made from unspecified milk or other animal milk - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	27	2	Salmonella	0
	Cheeses, made from unspecified milk or other animal milk - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Cheeses, made from unspecified milk or other animal milk - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Crustaceans - unspecified - cooked - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	10	0	Salmonella	0
	Crustaceans - unspecified - cooked - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	8	0	Salmonella	0
	Crustaceans - unspecified - raw - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Crustaceans - unspecified - raw - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Dairy products (excluding cheeses) - dairy desserts - frozen - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	5	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	19	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Not Available - Not Available - Monitoring - 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	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Egg products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Egg products - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	6	0	Salmonella	0
	Eggs - Packing centre - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Eggs - Packing centre - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	88	0	Salmonella	0
	Eggs - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Eggs - Retail - Not Available - Not Available - Monitoring - active - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	1	Salmonella	0
	Eggs - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	9	0	Salmonella	0
	Fish - smoked - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	5	0	Salmonella	0
	Fruits - products - canned - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Fruits and vegetables - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	8	0	Salmonella	0
	Fruits and vegetables - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Fruits and vegetables - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	20	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	15	0	Salmonella	0
	Meat from broilers (Gallus gallus) - fresh - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	9	0	Salmonella	0
	Meat from broilers (Gallus gallus) - mechanically separated meat (MSM) - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Meat from other animal species or not specified - meat preparation - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	127	3	Salmonella	0
	Meat from other animal species or not specified - meat preparation - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	1	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 other animal species or not specified - meat preparation - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	48	1	Salmonella	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	23	0	Salmonella	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	18	0	Salmonella	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	37	0	Salmonella	0
	Meat from other animal species or not specified - meat products - fermented sausages - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	13	0	Salmonella	0
	Meat from other poultry species - fresh - chilled - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	49	0	Salmonella	0
	Meat from pig - carcase - Slaughterhouse - Not Available - Not Available - Surveillance - Official sampling - Census	slaughter animal batch	400	Square centimetre	50	4	Salmonella	4
	Meat from pig - meat products - meat specialities - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Meat from poultry, unspecified - meat products - cooked, ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	51	0	Salmonella	0
	Meat from turkey - fresh - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Molluscan shellfish - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	6	0	Salmonella	0
	Molluscan shellfish - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	21	0	Salmonella	0
	Other processed food products and prepared dishes - Processing plant - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	2	0	Salmonella	0
	Other processed food products and prepared dishes - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	492	0	Salmonella	0
	Other processed food products and prepared dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	31	0	Salmonella	0
	Other processed food products and prepared dishes - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	71	0	Salmonella	0
	Other processed food products and prepared dishes - Unspecified - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	8	1	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	Other processed food products and prepared dishes - vegetable based dishes - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	55	0	Salmonella	0
	Other processed food products and prepared dishes - vegetable based dishes - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	16	0	Salmonella	0
	Sauce and dressings - mayonnaise - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	4	0	Salmonella	0
	Sauce and dressings - mayonnaise - Unspecified - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Vegetables - products - canned - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	4	0	Salmonella	0
	Vegetables - products - fruit purée - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	10	0	Salmonella	0
	Vegetables - products - fruit purée - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	25	Gram	1	0	Salmonella	0
	Vegetables - products - fruit purée - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	25	Gram	3	0	Salmonella	0
Asturias	Bakery products - cakes - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	20	0	Salmonella	0
	Bakery products - cakes - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	30	0	Salmonella	0
	Crustaceans - unspecified - cooked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	20	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	35	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	5	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	15	0	Salmonella	0
	Egg products - liquid - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	250	Gram	5	0	Salmonella	0
	Eggs - Packing centre - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	756	Gram	7	0	Salmonella	0
	Fish - smoked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	30	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - other food for infants and children - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	60	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
Asturias	Live bivalve molluscs - oysters - depurated - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	1000	Gram	1	0	Salmonella	0
	Meat from bovine animals and pig - meat preparation - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	45	0	Salmonella	0
	Meat from bovine animals and pig - meat preparation - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	100	5	Salmonella Derby	5
	Meat from broilers (Gallus gallus) - fresh - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	100	0	Salmonella	0
	Meat from pig - meat preparation - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	35	4	Salmonella Typhimurium	4
	Meat from pig - meat preparation - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	20	1	Salmonella Derby	1
							Salmonella Goldcoast	1
							Salmonella Typhimurium RDNC	1
							Salmonella Typhimurium, monophasic	1
	Meat from pig - meat products - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	151	Gram	100	1	Salmonella Rissen	1
	Meat from pig - meat products - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	152	Gram	100	0	Salmonella	0
	Molluscan shellfish - cooked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	20	0	Salmonella	0
	Other processed food products and prepared dishes - Hospital or medical care facility - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	80	0	Salmonella	0
	Other processed food products and prepared dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	120	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
SPAIN	Compound feedingstuffs for cattle - final product - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	68	1	Salmonella Enteritidis	1
	Compound feedingstuffs for pigs - final product - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	44	1	Salmonella Typhimurium	1
	Compound feedingstuffs for poultry (non specified) - final product - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	21	1	Salmonella spp., unspecified	1
	Compound feedingstuffs for poultry, broilers - final product - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	22	0	Salmonella	0
	Compound feedingstuffs for poultry, laying hens - final product - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	43	2	Salmonella spp., unspecified	2
	Feed material of cereal grain origin - barley derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	7	0	Salmonella	0
	Feed material of cereal grain origin - maize derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	15	0	Salmonella	0
	Feed material of cereal grain origin - other cereal grain derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	2	0	Salmonella	0
	Feed material of cereal grain origin - wheat derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	11	0	Salmonella	0
	Feed material of land animal origin - animal fat - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	6	0	Salmonella	0
	Feed material of land animal origin - blood meal - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	4	0	Salmonella	0
	Feed material of land animal origin - bone meal - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	26	Gram	455	19	Salmonella spp., unspecified	19
	Feed material of land animal origin - dairy products - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	5	0	Salmonella	0
	Feed material of land animal origin - feather meal - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	5	0	Salmonella	0
	Feed material of land animal origin - meat and bone meal - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	45	5	Salmonella spp., unspecified	5
	Feed material of land animal origin - meat meal - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	43	3	Salmonella Enteritidis	2
							Salmonella spp., unspecified	1
	Feed material of land animal origin - poultry offal meal - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (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
SPAIN	Feed material of marine animal origin - fish meal - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	84	0	Salmonella	0
	Feed material of oil seed or fruit origin - cotton seed derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	7	0	Salmonella	0
	Feed material of oil seed or fruit origin - rape seed derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	1	0	Salmonella	0
	Feed material of oil seed or fruit origin - soya (bean) derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	24	0	Salmonella	0
	Feed material of oil seed or fruit origin - sunflower seed derived - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	1	0	Salmonella	0
	Other feed material - forages and roughages - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	6	0	Salmonella	0
	Other feed material - legume seeds and similar products - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	1	0	Salmonella	0
	Other feed material - tubers, roots and similar products - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	25	Gram	9	0	Salmonella	0
	Pet food - Feed mill - Spain - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	26	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	Bakery products - pastry - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	51	1	Staphylococcus spp., unspecified	0
	Bakery products - pastry - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	11	0	Staphylococcus spp., unspecified	0
	Bakery products - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	101	1	Staphylococcus spp., unspecified	0
	Bakery products - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	56	0	Staphylococcus spp., unspecified	0
	Cheeses made from goats' milk - Retail - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	1	Gram	1	0	Staphylococcus spp., unspecified	0
	Cheeses, made from unspecified milk or other animal milk - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	112	5	Staphylococcus spp., unspecified	0
	Cheeses, made from unspecified milk or other animal milk - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	36	1	Staphylococcus spp., unspecified	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	1	0	Staphylococcus spp., unspecified	0
	Fish - cooked - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	1	0	Staphylococcus spp., unspecified	0
	Fish - smoked - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	5	0	Staphylococcus spp., unspecified	0
	Fruits and vegetables - Retail - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	1	Gram	3	0	Staphylococcus spp., unspecified	0
	Meat from duck - meat products - cooked, ready-to-eat - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	1	0	Staphylococcus spp., unspecified	0
	Meat from other animal species or not specified - meat preparation - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	3	0	Staphylococcus spp., unspecified	0
	Meat from other animal species or not specified - meat preparation - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	2	0	Staphylococcus spp., unspecified	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	16	1	Staphylococcus spp., unspecified	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	22	0	Staphylococcus spp., unspecified	0
	Meat from other animal species or not specified - meat products - fermented sausages - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	2	0	Staphylococcus spp., unspecified	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from pig - meat products - pâté - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	2	0	Staphylococcus spp., unspecified	0
	Other processed food products and prepared dishes - Catering - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	4	0	Staphylococcus spp., unspecified	0
	Other processed food products and prepared dishes - egg based dishes - Retail - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	1	Gram	2	0	Staphylococcus spp., unspecified	0
	Other processed food products and prepared dishes - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	2	0	Staphylococcus spp., unspecified	0
	Other processed food products and prepared dishes - Retail - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	1	Gram	37	2	Staphylococcus spp., unspecified	0
	Other processed food products and prepared dishes - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	531	10	Staphylococcus spp., unspecified	0
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - chilled - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	63	1	Staphylococcus spp., unspecified	0
	Vegetables - products - fruit purée - Processing plant - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	8	0	Staphylococcus spp., unspecified	0
	Vegetables - products - fruit purée - Retail - Not Available - Not Available - Monitoring - Official sampling - Objective sampling	single (food/feed)	1	Gram	4	1	Staphylococcus spp., unspecified	0
	Vegetables - products - Retail - Not Available - Not Available - Clinical investigations - Official sampling - Suspect sampling	single (food/feed)	1	Gram	1	0	Staphylococcus spp., unspecified	0
Asturias	Cheeses, made from mixed milk from cows, sheep and/or goats - unspecified - made from raw or low heat-treated milk - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	50	0	Staphylococcus	0
	Crustaceans - unspecified - cooked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	20	0	Staphylococcus	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	15	0	Staphylococcus	0
	Molluscan shellfish - cooked - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	20	0	Staphylococcus	0
	Other processed food products and prepared dishes - Hospital or medical care facility - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	80	4	Staphylococcus	4
	Other processed food products and prepared dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	150	Gram	120	5	Staphylococcus	5

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
SPAIN	Cattle (bovine animals) - dairy cows - adult - Farm - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	5	0	Toxoplasma	0
	Dogs - pet animals - Veterinary clinics - Spain - animal sample - blood - Monitoring - active - Official sampling - Selective sampling	animal	226	11	Toxoplasma gondii	11
	Goats - Farm - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	27	11	Toxoplasma gondii	11
	Sheep - Farm - Spain - animal sample - blood - Monitoring - passive - Official sampling - Suspect sampling	animal	32	12	Toxoplasma gondii	12

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	Pigs - fattening pigs - not raised under controlled housing conditions - Farm - Not Available - Not Available - Monitoring - Official sampling - Census	animal	505	0	Trichinella	0
	Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Not Available - Not Available - Monitoring - Official sampling - Census	animal	143136	0	Trichinella	0
	Wild boars - Game handling estabilishment - Not Available - Not Available - Surveillance - Official, based on Regulation 854/2004 - Not specified	animal	45385	223	Trichinella	0
Asturias	Cantabrian chamois - Farm - Spain - animal sample - Surveillance - Official sampling - Census	animal	1	0	Trichinella	0
	Deer - wild - Farm - Spain - animal sample - Surveillance - Official sampling - Census	animal	2	0	Trichinella	0
	Deer - wild - roe deer - Farm - Spain - animal sample - Surveillance - Official sampling - Census	animal	1	0	Trichinella	0
	Pigs - breeding animals - not raised under controlled housing conditions - Farm - Spain - animal sample - Surveillance - Official sampling - Census	animal	3203	0	Trichinella	0
	Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	slaughter animal batch	79997	0	Trichinella	0
	Solipeds, domestic - Slaughterhouse - Spain - animal sample - Surveillance - Official sampling - Census	slaughter animal batch	3968	0	Trichinella	0
	Wild boars - wild - Farm - Spain - animal sample - Surveillance - Official sampling - Census	animal	2479	0	Trichinella	0
	Wild boars - wild - Game handling estabilishment - Spain - animal sample - Surveillance - Official sampling - Census	slaughter animal batch	163	0	Trichinella	0

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
SPAIN	Cattle (bovine animals) - Farm - Spain - animal sample - faeces - Monitoring - passive - Official sampling - Suspect sampling	herd/flock	64	12	Yersinia enterocolitica - serotype O:9	10
					Yersinia enterocolitica unspecified	2

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

No data returned for this view. This might be because the applied filter excludes all data.

Strong Foodborne Outbreaks: detailed data

No data returned for this view. This might be because the applied filter excludes all data.

Weak Foodborne Outbreaks: detailed data

No data returned for this view. This might be because the applied filter excludes all data.

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**8**	**2**	**16**	**4**	**2**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**82**	**82**	**82**	**82**	**82**	**82**
MIC	**N of resistant isolates**	**82**	**15**	**5**	**82**	**50**	**79**
0.25				3			
0.5				49			
1				21		4	
2			22	4		20	
4		4	1			8	
8		22	4	1			
16		33		3		4	
>16		23		1		46	
32			7		1		1
64			2		32		15
>64					49		63
>128			6				
<=0.5							3
<=1			40				

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**161**	**161**	**161**	**161**	**161**	**161**
MIC	**N of resistant isolates**	**143**	**1**	**0**	**142**	**6**	**132**
0.25		4		89			
0.5		2		61		16	
1				1		118	2
2		1			6	16	1
4		10	1		10	2	1
8		80			2		12
16		33			1		7
>16		19				6	
32					5		4
64					18		47
>64					119		60
128			1				
<=0.12		12		10			
<=0.25						3	
<=0.5							27
<=1			159				

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Convenient sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**1**	**0**	**1**
0.25				1			
1						1	
4		1					
>64					1		1
<=1			1				

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring - EFSA specifications

Sampler: Industry sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**1**	**0**	**1**
0.5				1			
1						1	
8		1					
64							1
>64					1		
<=1			1				

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**86**	**86**	**86**	**86**	**86**	**86**
MIC	**N of resistant isolates**	**82**	**0**	**0**	**82**	**5**	**80**
0.25				34			
0.5				47		7	
1						62	
2				1	1	10	1
4		2	1		2	2	
8		48			1		
16		17					2
>16		15				5	
32							5
64					7		21
>64					75		51
<=0.12		4		4			
<=0.5							6
<=1			85				

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Selective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
	ECOFF	**0.5**	**4**	**2**	**16**	**4**	**1**
	Lowest limit	**0.12**	**1**	**0.12**	**1**	**0.25**	**0.5**
	Highest limit	**16**	**128**	**16**	**64**	**16**	**64**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**1**	**0**	**1**
0.25				1			
1						1	
>16		1					
>64					1		1
<=1			1				

Table Antimicrobial susceptibility testing of Salmonella 6,7:-:1,5 in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	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	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present
	ECOFF	0.12	0.12	0.5	0.5	0.5	0.5	8	8	2	2	2	2	0.06	0.06	1	1	0.125	0.125	32	32
	Lowest limit	0.06	0.06	0.25	0.25	0.06	0.06	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	128	128
	N of tested isolates	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
MIC	N of resistant isolates	5	5	5	5	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0.12						1	1														
0.25							2									1	1				
0.5												1	3								
2		1	3								4										
4			1					1													
8					1				4											1	3
16				1	2																1
32					1																
128										1											
<=0.015														1	4						
<=0.03																		1	4		
<=0.06							1														
<=0.12													1				3				

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**5**	**0**	**5**	**1**	**1**	**4**	**0**	**2**	**0**	**2**	**4**	**3**	**1**	**2**
0.03							4								
0.06							1								
0.5							3							5	2
1							1							1	
2		2			4				2					1	
4									2				1		
>4				5											
8			5								1				
>8					1										
16			4			3					2				
32											1	1			
>32															2
64												2	2		
>64		5											1		
128												2			
>128						1					1				
>1024												4			
<=0.03										9					
<=0.25				4										2	5
<=0.5					4				5						
<=1		2						9							
<=2													5		
<=4											4				
<=8						5									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent
	Ceftazidime synergy test	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present
	ECOFF	0.12	0.5	0.5	8	2	2	0.06	1	0.125	32
	Lowest limit	0.06	0.25	0.06	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	128
	N of tested isolates	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	1	0	0	0	0	0	0	0	0
0.25				1							
1						1					
2					1						
4		1									1
8			1								
<=0.015								1			
<=0.03										1	
<=0.12							1		1		

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**
MIC	**N of resistant isolates**	**6**	**0**	**1**	**0**	**1**	**5**	**0**	**1**	**0**	**5**	**2**	**5**	**0**	**0**
0.03							8								
0.25							2								
0.5							1							4	2
1					1		2		2					1	
2								3							
4			1						1						
>4				1											
8			12								1				
16												1			
32											1	3			
64												4	3		
>64		6											2		
128						1						2			
>128											4				
256												1			
>1024												2			
<=0.03										13					
<=0.25				12										8	11
<=0.5					12				10						
<=1		7						10							
<=2													8		
<=4											7				
<=8						12									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**2**	**2**
0.06							2								
2														2	
4		2													
8											1				
16			2			1									
>32															2
>64													2		
>1024												2			
<=0.03										2					
<=0.25				2											
<=0.5					2				2						
<=1								2							
<=4											1				
<=8						1									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.06										1					
8			1												
64												1			
<=0.015							1								
<=0.25				1										1	1
<=0.5					1				1						
<=1		1						1							
<=2													1		
<=4											1				
<=8						1									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**
MIC	**N of resistant isolates**	**45**	**0**	**0**	**0**	**17**	**32**	**0**	**0**	**0**	**1**	**48**	**47**	**15**	**47**
0.06							15			1					
0.25							27								
0.5				5			5							32	1
1					13				5					1	
2		1			1				1					15	
4			1												
8			30								13				
16			17								29				
32											1		1		1
>32															46
64						1							12		
>64		45											34		
128						15									
>128						1									
>1024												48			
<=0.015							1								
<=0.03										47					
<=0.25				43											
<=0.5					34				42						
<=1		2						48							
<=2													1		
<=4											5				
<=8						31									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Convenient sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**28**	**28**	**28**	**28**	**28**	**28**	**28**	**28**	**28**	**28**	**28**	**28**	**28**	**28**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**13**	**8**	**0**	**0**	**13**	**1**	**1**	**0**	**1**
0.03							10								
0.06										1					
0.12							2								
0.25							11								
0.5														5	18
1									2					1	
2		6						11							
4			12					8							
8			16												
16												5			
32												11			
>32															1
64												11			
>64													1		
>128											13				
>1024												1			
<=0.015							5								
<=0.03										27					
<=0.25				28										22	9
<=0.5					28				26						
<=1		22						9							
<=2													27		
<=4											15				
<=8						28									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent
	Ceftazidime synergy test	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present
	ECOFF	0.12	0.5	0.5	8	2	2	0.06	1	0.125	32
	Lowest limit	0.06	0.25	0.06	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	128
	N of tested isolates	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	1	0	0	0	0	0	0	0	0
0.25									1		
1						1					
2		1									
4					1						
16			1								1
<=0.015								1			
<=0.03										1	
<=0.06				1							
<=0.12							1				

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**6**	**1**	**2**	**1**	**0**
0.03							1								
0.12							1								
0.25							4								
0.5							1								2
1							1		1						
2									1					1	
4			5												
8			2												
16			1			1									
32												6			
64												1	1		
>64		1											1		
>128											6				
1024												1			
<=0.03										8					
<=0.25				8										7	6
<=0.5					8				6						
<=1		7						8							
<=2													6		
<=4											2				
<=8						7									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
MIC	**N of resistant isolates**	**11**	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**17**	**0**	**14**	**5**	**0**
0.25							4								
0.5							7							6	12
1					4		7		1					6	1
2		1												5	
4		2	2										3		
8			5												
16			11			7					1	2			
32												13			
64												3	4		
>64		11											10		
128											1				
>128											16				
<=0.03										18					
<=0.25				18										1	5
<=0.5					14				17						
<=1		4						18							
<=2													1		
<=8						11									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**2**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**
0.03							1								
0.06							1								
0.5				2			6							4	2
1					3		3							3	
2		2													
4		3	3										4		
8			5								1				
16			4			5					5	1			
32											3	7			
64											1	3			
>64		2													
<=0.015							1								
<=0.03										12					
<=0.25				10										5	10
<=0.5					9				12						
<=1		5						12							
<=2													8		
<=4											2				
<=8						7						1			

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**6**	**6**	**5**	**0**	**1**
0.03							4								
0.5							1							1	4
1					2		5							5	
2		1													
4		3													
8			8												
16			2			2									
32									1						
>32															1
64												2			
>64													5		
128												2			
>128											6				
512												1			
>1024												5			
<=0.03										10					
<=0.25				10										4	5
<=0.5					8				9						
<=1		6						10							
<=2													5		
<=4											4				
<=8						8									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
0.03							9								
0.25							1								
0.5														1	8
1									2						
2		4						1							
4			5												
8			8												
16												2			
32												2			
64												6			
128												2			
>128											1				
256												1			
<=0.015							3								
<=0.03										13					
<=0.25				13										12	5
<=0.5					13				11						
<=1		9						12							
<=2													13		
<=4											12				
<=8						13									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
MIC	**N of resistant isolates**	**14**	**0**	**0**	**0**	**0**	**17**	**0**	**15**	**0**	**17**	**15**	**11**	**0**	**0**
0.5														6	10
1					5				1					6	2
2		1			2										
4			4												
8			10				4								
>8							13								
16			4			3			10						
32									3						
>32									2						
64		3										2	9		
>64		11											2		
128												1			
>128											17				
>1024												15			
<=0.015							1								
<=0.03										18					
<=0.25				18										6	6
<=0.5					11				2						
<=1		3						18							
<=2													7		
<=4											1				
<=8						15									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**24**	**24**	**24**	**24**	**24**	**24**	**24**	**24**	**24**	**24**	**24**	**24**	**24**	**24**
MIC	**N of resistant isolates**	**22**	**1**	**0**	**0**	**3**	**24**	**0**	**21**	**0**	**23**	**21**	**20**	**1**	**3**
0.5				2										18	12
1					7		1							5	1
2														1	1
4			3										3		
8			15				12		1						
>8							11								
16			5			6			16		1	1			
32		4				1						2			
>32									4						3
64		5											18		
>64		13	1										2		
128						2									
>128											23				
>1024												21			
<=0.03										24					
<=0.25				22											7
<=0.5					17				3						
<=1		2						24							
<=2													1		
<=8						15									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Not applicable

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**9**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03							3								
0.5							9							2	2
1									1						
2		1						1							
8			12								6				
16											3	1			
32												5			
64												5			
>64		9													
128												1			
<=0.03										12					
<=0.25				12										10	10
<=0.5					12				11						
<=1		2						11							
<=2													12		
<=4											3				
<=8						12									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.06										1					
0.5														1	
8			1												
64												1			
<=0.015							1								
<=0.25				1											1
<=0.5					1				1						
<=1		1						1							
<=2													1		
<=4											1				
<=8						1									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid	Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid	Ertapenem	Imipenem	Meropenem	Temocillin
	Cefotaxime synergy test	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent	Negative/Absent
	Ceftazidime synergy test	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present	Positive/Present
	ECOFF	0.12	0.5	0.5	8	2	2	0.06	1	0.125	32
	Lowest limit	0.06	0.25	0.06	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	128
	N of tested isolates	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	1	0	0	0	0	0	0	0	0
0.25									1		
0.5						1					
2		1			1						
4											1
8			1								
<=0.015								1			
<=0.03										1	
<=0.06				1							
<=0.12							1				

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
MIC	**N of resistant isolates**	**1**	**0**	**1**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**1**
0.03							1								
0.06										1					
0.25							1								
0.5														1	
1					1										
2								1							
4									1						
>4				1											
8			3												
16											1				
>32															1
64												2	1		
>64		1													
>128						1									
>1024												1			
<=0.015							1								
<=0.03										2					
<=0.25				2										2	2
<=0.5					2				2						
<=1		2						2							
<=2													2		
<=4											2				
<=8						2									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**
0.03							7								
0.5														3	2
1									1						
4			5												
8			7												
16			1									4			
32												6			
64												2	2		
<=0.015							6								
<=0.03										13					
<=0.25				13										10	11
<=0.5					13				12						
<=1		13						13							
<=2													11		
<=4											13				
<=8						13						1			

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**8**	**0**	**0**	**2**	**0**	**0**	**0**
0.03							4								
0.06							1			1					
0.25							2								
0.5															5
2		1													
4			7												
8			1								2				
16											2				
32												3			
>32									8						
64												1			
128												2			
>1024												2			
<=0.015							1								
<=0.03										7					
<=0.25				8										8	3
<=0.5					8										
<=1		7						8							
<=2													8		
<=4											4				
<=8						8									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
MIC	**N of resistant isolates**	**1**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**
0.12							3								
0.25							4								
0.5				1											6
1					1		1		1						
4			4										1		
8			4												
16			1			1					4				
32												7			
64												1			
>64		1													
>128											4				
512												1			
<=0.015							1								
<=0.03										9					
<=0.25				8										9	3
<=0.5					8				8						
<=1		8						9							
<=2													8		
<=4											1				
<=8						8									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.06										1					
0.5															1
4			1												
64												1			
<=0.015							1								
<=0.25				1										1	
<=0.5					1				1						
<=1		1						1							
<=2													1		
<=4											1				
<=8						1									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

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Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

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Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0.03							1								
0.06										1					
0.5															2
8			2												
32												1			
64												1			
<=0.015							1								
<=0.03										1					
<=0.25				2										2	
<=0.5					2				2						
<=1		2						2							
<=2													2		
<=4											2				
<=8						2									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

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Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**
0.03							2								
0.5														1	4
2		3													
8			4												
64												1			
128												1			
512												1			
1024												1			
<=0.015							2								
<=0.03										4					
<=0.25				4										3	
<=0.5					4				4						
<=1		1						4							
<=2													4		
<=4											4				
<=8						4									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
MIC	**N of resistant isolates**	**7**	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**0**	**2**	**6**	**7**	**0**	**0**
0.03							6								
0.06							2			1					
0.25							1								
0.5				1										4	5
1									1					1	
2		1					1								
4			3												
8			5								1				
16			2			1						1			
32									1		1		1		
64												2	1		
>64		7											5		
128												1			
>128						2					1				
1024												1			
>1024												5			
<=0.03										9					
<=0.25				9										5	5
<=0.5					10				8						
<=1		2						10							
<=2													3		
<=4											7				
<=8						7									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
MIC	**N of resistant isolates**	**8**	**0**	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**5**	**8**	**9**	**0**	**0**
0.06										1					
0.25							4								
0.5							1							1	1
1									2						
4			5												
8			5								1				
16												1			
32											1		1		
64													6		
>64		8											2		
128												1			
>128						3					4				
>1024												8			
<=0.015							5								
<=0.03										9					
<=0.25				10										9	9
<=0.5					10				8						
<=1		2						10							
<=2													1		
<=4											4				
<=8						7									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
	N of resistant isolates	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	**4**	**0**	**0**
0.03							2								
0.06										1					
0.12							1								
0.5				1											2
1					1									1	
4			2												
8			1												
16			1			1					1				
64												1	1		
>64		4											3		
>1024												4			
<=0.015							2								
<=0.03										4					
<=0.25				4										4	3
<=0.5					4				5						
<=1		1						5							
<=2			1										1		
<=4											4				
<=8						4									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	**8**	**16**	**0.5**	**2**	**16**	**0.064**	**2**	**2**	**0.125**	**16**	**256**	**8**	**1**	**2**
	Lowest limit	**1**	**2**	**0.25**	**0.5**	**8**	**0.015**	**1**	**0.5**	**0.03**	**4**	**8**	**2**	**0.25**	**0.25**
	Highest limit	**64**	**64**	**4**	**8**	**128**	**8**	**16**	**32**	**16**	**128**	**1024**	**64**	**8**	**32**
	N of tested isolates	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**8**	**0**	**11**	**5**	**0**	**0**	**0**
0.03							1								
0.25							8								
0.5							2							1	2
1							1								
2								2							
4		1	3										1		
8			8												
16			1			1			1			1			
32									2			2			
>32									5						
64												4			
>128											11				
>1024												5			
<=0.03										12					
<=0.25				12										11	10
<=0.5					12				4						
<=1		11						10							
<=2													11		
<=4											1				
<=8						11									

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

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 - EFSA specifications

Sampler: Official sampling | Sampling Strategy: Objective sampling | Programme Code: AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

AM substance	Cefepime				Cefotaxim				Cefotaxime + Clavulanic acid			
Cefotaxime synergy test	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
ECOFF	0.12	0.12	0.12	0.12	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Lowest limit	0.06	0.06	0.06	0.06	0.25	0.25	0.25	0.25	0.06	0.06	0.06	0.06
Highest limit	32	32	32	32	64	64	64	64	64	64	64	64
N of tested isolates	15	15	15	15	15	15	15	15	15	15	15	15
MIC / N of resistant isolates	15	15	15	15	15	15	15	15	2	2	2	2
0.03												
0.06												
0.12									1		1	
0.25	1			2								
0.5	3											
1	1				1							
2		1	1		2							
4	1				2	1						
8	3							1				2
16	2						1	1				
32												
64					1							
>64					5							
<=0.015												
<=0.03												
<=0.06									10	1		
<=0.12												
<=0.25												

AM substance	Cefoxitin				Ceftazidim				Ceftazidime + Clavulanic acid			
Cefotaxime synergy test	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
ECOFF	8	8	8	8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lowest limit	0.5	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.12	0.12	0.12	0.12
Highest limit	64	64	64	64	128	128	128	128	128	128	128	128
N of tested isolates	15	15	15	15	15	15	15	15	15	15	15	15
MIC / N of resistant isolates	3	3	3	3	13	13	13	13	2	2	2	2
0.03												
0.06												
0.12												
0.25									1			
0.5							1					
1					1							
2	1				1							
4	7	1			1							
8	2		1		5							2
16	1				2			2				
32					1							
64				1								
>64				1								
<=0.015												
<=0.03												
<=0.06												
<=0.12									10	1	1	
<=0.25						1						

AM substance	Ertapenem				Imipenem				Meropenem				Temocillin			
Cefotaxime synergy test	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
ECOFF	0.06	0.06	0.06	0.06	0.5	0.5	0.5	0.5	0.125	0.125	0.125	0.125	32	32	32	32
Lowest limit	0.015	0.015	0.015	0.015	0.12	0.12	0.12	0.12	0.03	0.03	0.03	0.03	0.5	0.5	0.5	0.5
Highest limit	2	2	2	2	16	16	16	16	16	16	16	16	128	128	128	128
N of tested isolates	15	15	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	0	0	0	0	0	0
0.03				1												
0.06	1			1												
0.12																
0.25																
0.5																
1																
2																
4													4	1		1
8													6		1	
16													1			1
32																
64																
>64																
<=0.015	10	1	1													
<=0.03									11	1	1	2				
<=0.06																
<=0.12					11	1	1	2								
<=0.25																

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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Selective sampling

Programme Code: AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	Atl 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	0.12	0.25	0.25	8	0.5	0.5	0.06	0.5	0.125	32
	Lowest limit	0.06	0.25	0.06	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	128
	N of tested isolates	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	1	0	0	0	0	0	0	0	0
0.5						1					
4		1			1						
8											1
16			1								
<=0.015								1			
<=0.03										1	
<=0.06				1							
<=0.12							1		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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

MIC	AM	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	substance														
	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	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**	**169**
	N of resistant isolates	**106**	**18**	**15**	**14**	**29**	**155**	**2**	**60**	**0**	**150**	**83**	**104**	**0**	**56**
0.03							3								
0.06										1					
0.12							1			2					
0.25							22								
0.5							13							9	44
1					2		25		29						4
2		19		4			16	1	4						
4		40	33		2		9	1	1				2		
>4				11											
8		1	67		5		52		1		2				
>8					5		17								
16			46			14			10		2	34			
>16								1							
32			17			7			19		1	9	4		18
>32									29						38
64		33				6					6	2	65		
>64		73	1										35		
128						3					51				
>128						13					92				
256												2			
1024												26			
>1024												55			
<=0.015							11								
<=0.03										166					
<=0.25				154										160	65
<=0.5					155				76						
<=1		3						166							
<=2			5										63		
<=4											15				
<=8						126						41			

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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Selective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent
ECOFF	**0.12**	**0.12**	**0.12**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**8**	**8**	**8**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.06**	**0.06**	**0.06**	**0.5**	**0.5**	**0.5**	**0.125**	**0.125**	**0.125**	**32**	**32**	**32**
Lowest limit	**0.06**	**0.06**	**0.06**	**0.25**	**0.25**	**0.25**	**0.06**	**0.06**	**0.06**	**0.5**	**0.5**	**0.5**	**0.25**	**0.25**	**0.25**	**0.12**	**0.12**	**0.12**	**0.015**	**0.015**	**0.015**	**0.12**	**0.12**	**0.12**	**0.03**	**0.03**	**0.03**	**0.5**	**0.5**	**0.5**
Highest limit	**32**	**32**	**32**	**64**	**64**	**64**	**64**	**64**	**64**	**64**	**64**	**64**	**128**	**128**	**128**	**128**	**128**	**128**	**2**	**2**	**2**	**16**	**16**	**16**	**16**	**16**	**16**	**128**	**128**	**128**
N of tested isolates	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**	**278**
MIC	**N of resistant isolates**	**264**	**264**	**264**	**278**	**278**	**278**	**40**	**40**	**40**	**49**	**49**	**49**	**250**	**250**	**250**	**40**	**40**	**40**	**2**	**2**	**2**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**
0.03																			16	1	20									
0.06																			2		6						1			
0.12			12				21	3													2									
0.25	19		23				1									16	5					7	2	18						
0.5	71		3										2	22								1								
1	20	4	1	5					1				42	4				1										1	1	
2	11	11		24		1			4	26	5		17															1	1	
4	15	10		50	2	6			15	109	9	1	9		4			13										103	18	22
8	39	3		28	5	24			17	65	14		39		16			22										85	12	17
16	21	1		13	12	8			3	6			70		17			3										15		2
>16																									1					
32	8			9	2	2				2	1	6	24		3			1										1		
>32	4																													
64				25	5							27	4																	
>64				54	3							7																		
>128													1																	
<=0.015																			190	28	13									
<=0.03																									207	29	40			
<=0.06			2				186	26	1																					
<=0.12																192	24	1				200	27	23						
<=0.25														3	1															
<=0.5																												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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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	278	278	278	278	278	278	278	278	278	278	278	278	278	278
N of resistant isolates	278	13	278	247	54	236	1	98	0	217	176	186	0	78
MIC														
0.03						5								
0.06						1								
0.12						7								
0.25						46								
0.5						16							6	67
1			1	44		21		58					1	9
2			29	14		6	1	9						1
4		114	70	16		29	1	2				2		
>4			178											
8		116		59		76		3		13				
>8				114		35								
16		29			11			23		3	45	1		
32		6			16			42			10	10		6
>32								28						72
64	22	6			25					9	3	70		
>64	256	1										105		
128					5					44				
>128					8					164				
512											2			
1024											15			
>1024											159			
<=0.015						36								
<=0.03									278					
<=0.25													271	123
<=0.5				31				113						
<=1							276							
<=2		6										90		
<=4										45				
<=8					213						44			

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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	Atl 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	0.12	0.25	0.25	8	0.5	0.5	0.06	0.5	0.125	32
	Lowest limit	0.06	0.25	0.06	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	128
	N of tested isolates	27	27	27	27	27	27	27	27	27	27
MIC	N of resistant isolates	27	27	0	0	27	0	0	0	0	0
0.25		9					1		3		
0.5		15									
1		1	1								
2		1	12		10						1
4			7		11						17
8			6		6	11					9
16		1				12					
32						4					
>64			1								
<=0.015								27			
<=0.03										27	
<=0.06				27							
<=0.12							26		24		

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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

MIC	AM	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
Substance														
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	169	169	169	169	169	169	169	169	169	169	169	169	169	169
N of resistant isolates	140	5	28	28	59	112	5	15	0	95	94	139	0	61
0.03						2								
0.06						4								
0.12						1								
0.25						28								
0.5						9							6	36
1						5		35						1
2	16		10			1	1	6						
4	12	84	17			2	5					1		
>4			1											
8		58		18		54				12		1		
>8				10		12								
16		8			4			2		7	27	1		
32		3			19			6		1	9	4		27
>32								7						34
64	65	2			14					1	3	97		
>64	75											37		
128					21					51				
>128					5					42				
512											1			
1024											42			
>1024											51			
<=0.015						51								
<=0.03									169					
<=0.25			141										163	71
<=0.5				141				113						
<=1	1						163							
<=2		14										28		
<=4										55				
<=8					106						36			

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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Selective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	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	0	0	1	1	0	0	0	1	1	1	0	0
0.5															1
8			1												
>8							1								
64						1									
>64		1											1		
>128											1				
>1024												1			
<=0.03										1					
<=0.25				1										1	
<=0.5					1				1						
<=1								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 - EFSA specifications
Sampler: Official sampling
Sampling Strategy: Objective sampling
Programme Code: ESBL MON pnl2
Analytical Method: Micromethod dilution (in microtiter plate)
Country of Origin: Spain

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	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent	Positive/Present	Positive/Present	Negative/Absent
ECOFF	0.12	0.12	0.12	0.25	0.25	0.25	0.25	0.25	0.25	8	8	8	0.5	0.5	0.5	0.5	0.5	0.5	0.06	0.06	0.06	0.5	0.5	0.5	0.125	0.125	0.125	32	32	32
Lowest limit	0.06	0.06	0.06	0.25	0.25	0.25	0.06	0.06	0.06	0.5	0.5	0.5	0.25	0.25	0.25	0.12	0.12	0.12	0.015	0.015	0.015	0.12	0.12	0.12	0.03	0.03	0.03	0.5	0.5	0.5
Highest limit	32	32	32	64	64	64	64	64	64	64	64	64	128	128	128	128	128	128	2	2	2	16	16	16	16	16	16	128	128	128
N of tested isolates	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260
N of resistant isolates	258	258	258	260	260	260	4	4	4	12	12	12	256	256	256	3	3	3	0	0	0	1	1	1	0	0	0	0	0	0
MIC																														
0.03																			15		1									
0.06																			3						1					
0.12	2						10	3																						
0.25	57		1				1									29	4					28								
0.5	110												4			2						2								
1	25	1		2			1	1					6	4																
2	6			44						16			4			1	1											7		
4	14	5		110						134	3		11					1										143	3	1
8	12	2		37		1			1	90	5		67	1														89	4	
16	18	1		6	2					8			123		1													9	2	
>16																						1								
32	5			2	2					2	1		32																	
>32	1																													
64				12	3								7																	
>64				37	2		1					1																		
<=0.015																			232	9										
<=0.03																									249	9	1			
<=0.06							237	5																						
<=0.12																218	4					219	9	1						
<=0.5																												2		

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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Selective sampling

Programme Code: ESBL MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

	Atl 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	0.12	0.25	0.25	8	0.5	0.5	0.06	0.5	0.125	32
	Lowest limit	0.06	0.25	0.06	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	128
	N of tested isolates	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
1						1					
4					1						1
16		1									
>64			1								
<=0.015								1			
<=0.03										1	
<=0.06				1							
<=0.12							1		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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

MIC	AM	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	substance														
	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	**260**	**260**	**260**	**260**	**260**	**260**	**260**	**260**	**260**	**260**	**260**	**260**	**260**	**260**
	N of resistant isolates	**260**	**2**	**260**	**256**	**170**	**218**	**17**	**9**	**0**	**184**	**208**	**245**	**0**	**79**
0.03							4								
0.06							3								
0.12							2								
0.25							40								
0.5							14							5	56
1					9		3		81					1	3
2				51	4		6	1	5						1
4			113	109	10		2	17							
>4				100											
8			120		70		58				21				
>8					163		93								
16			13			2			1		6	15	1		
32			1			55			3		2	7	6		3
>32									5						76
64						65					4	1	83		
>64		260	1										155		
128						35					10	1			
>128						15					168				
>1024												207			
<=0.015							35								
<=0.03										260					
<=0.25														254	121
<=0.5					4				165						
<=1								242							
<=2			12										15		
<=4											49				
<=8						88						29			

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 - EFSA specifications

Sampler: Official sampling

Sampling Strategy: Selective sampling

Programme Code: ESBL MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Spain

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

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

No data returned for this view. This might be because the applied filter excludes all data.