European Food Safety Authority

# ZOONOSES MONITORING

## Portugal

# 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 2017

# 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 Portugal during the year 2017.

The information covers the occurrence of these diseases and agents in animals, foodstuffs and in some cases also in feedingstuffs. In addition the report includes data on antimicrobial resistance in some zoonotic agents and indicator bacteria as well as information on epidemiological investigations of foodborne outbreaks.
Complementary data on susceptible animal populations in the country is also given. The information given covers both zoonoses that are important for the public health in the whole European Union as well as zoonoses, which are relevant on the basis of the national epidemiological situation.
The report describes the monitoring systems in place and the prevention and control strategies applied in the country. For some zoonoses this monitoring is based on legal requirements laid down by the European Union legislation, while for the other zoonoses national approaches are applied.

The report presents the results of the examinations carried out in the reporting year. A national evaluation of the epidemiological situation, with special reference to trends and sources of zoonotic infections, is given. Whenever possible, the relevance of findings in foodstuffs and animals to zoonoses cases in humans is evaluated.
The information covered by this report is used in the annual European Union Summary Reports on zoonoses and antimicrobial resistance that are published each year by EFSA.

The national report contains two parts: tables summarising data reported in the Data Collection Framework and the related text forms. The text forms were sent by email as pdf files and they are incorporated at the end of the report.

---

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

List of Contents

# ANIMAL POPULATION TABLES

## Table Susceptible animal population

| Animal species | Category of animals | Population | | |
|---|---|---|---|---|
| | | animal | slaughter animal (heads) | herd/flock |
| Cattle (bovine animals) | Cattle (bovine animals) | 1,666,040 | 382,413 | 40,917 |
| | Cattle (bovine animals) - calves (under 1 year) | 290,879 | | 23,637 |
| | Cattle (bovine animals) - dairy cows | 341,816 | | 10,106 |
| | Cattle (bovine animals) - meat production animals | 780,899 | | 29,659 |
| Deer | Deer - farmed | | 41 | |
| Ducks | Ducks | 746,470 | 3,959,449 | 20 |
| Gallus gallus (fowl) | Gallus gallus (fowl) | | 215,769,317 | |
| | Gallus gallus (fowl) - breeding flocks, unspecified | | 1,964,227 | |
| | Gallus gallus (fowl) - broilers | 40,804,716 | 210,209,743 | 1,501 |
| | Gallus gallus (fowl) - laying hens | 11,708,665 | 3,595,347 | 188 |
| | Gallus gallus (fowl) - parent breeding flocks, unspecified | 4,644,852 | | 110 |
| Geese | Geese | | 6 | |
| Goats | Goats | 328,232 | 107,147 | 11,719 |
| | Goats - animals over 1 year | 282,713 | | 11,601 |
| | Goats - animals under 1 year | 45,519 | | 4,238 |
| | Goats - meat production animals | 247,173 | | 10,945 |
| | Goats - milk goats | 69,578 | | 772 |
| Guinea fowl | Guinea fowl | | 320 | |
| Pigs | Pigs | 2,119,532 | 1,262,215 | 4,531 |
| | Pigs - breeding animals | 223,123 | | 3,251 |
| | Pigs - breeding animals - unspecified - sows and gilts | 218,267 | | 3,229 |
| | Pigs - fattening pigs | 1,169,298 | | 2,750 |
| | Pigs - fattening pigs - unspecified - piglets | | 1,224,482 | |
| Quails | Quails | | 9,194,121 | |
| Rabbits | Rabbits - farmed | | 4,104,195 | |
| Ratites (ostrich, emu, nandu) | Ratites (ostrich, emu, nandu) - farmed | | 55 | |
| Sheep | Sheep | 2,204,763 | 803,634 | 25,042 |
| | Sheep - animals over 1 year | 1,715,410 | | 24,903 |
| | Sheep - animals under 1 year (lambs) | 489,353 | | 14,072 |
| | Sheep - meat production animals | 1,911,068 | | 23,539 |
| | Sheep - milk ewes | 257,257 | | 1,508 |

| Animal species | Category of animals | Population | | |
|---|---|---|---|---|
| | | animal | slaughter animal (heads) | herd/flock |
| Solipeds, domestic | Solipeds, domestic | 84,760 | 1,002 | 21,307 |
| Turkeys | Turkeys | 1,861,945 | 3,602,995 | 127 |
| Wild boars | Wild boars - farmed | | 189 | |

## DISEASE STATUS TABLES

### 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 |
|---|---|---|---|---|---|---|---|
| PORTUGAL | 1,624,756 | 910,874 | 900,822 | 820,044 | 343 | 359 | 371 |
| Norte | 355,567 | 179,481 | 179,118 | 141,522 | 172 | 169 | 177 |
| Centro (PT) | 166,322 | 96,398 | 96,253 | 75,081 | 0 | 0 | 0 |
| Lisboa | 186,611 | 72,261 | 71,401 | 59,608 | 1 | 3 | 3 |
| Alentejo | 710,992 | 427,962 | 423,703 | 417,251 | 156 | 174 | 174 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 205,264 | 134,772 | 130,347 | 126,582 | 14 | 13 | 17 |

## 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 |
|---|---|---|---|---|---|---|
| PORTUGAL | 57 | 0 | 39,060 | 35,340 | 31,071 | 62 |
| Norte | 31 | 0 | 19,376 | 17,083 | 16,040 | 31 |
| Centro (PT) | 0 | 0 | 7,981 | 7,537 | 6,347 | 0 |
| Lisboa | 1 | 0 | 2,264 | 1,469 | 1,329 | 1 |
| Alentejo | 11 | 0 | 4,726 | 4,538 | 4,371 | 16 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 14 | 0 | 4,713 | 4,713 | 2,984 | 14 |

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

| Region | Total number of herds under the program, at the end of the period | Total number of animals under the program, 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PORTUGAL | 35,340 | 1,446,302 | 10 | 1,339 | 21 | 997 | 122 | 4,477 | 6,417 | 230,584 | 28,770 | 1,208,905 |
| Norte | 17,083 | 296,423 | 5 | 291 | 17 | 150 | 46 | 653 | 1,711 | 21,928 | 15,304 | 273,401 |
| Centro (PT) | 7,537 | 158,648 | 0 | 0 | 0 | 0 | 22 | 488 | 0 | 0 | 7,515 | 158,160 |
| Lisboa | 1,469 | 132,951 | 0 | 0 | 0 | 0 | 29 | 385 | 0 | 0 | 1,440 | 132,566 |
| Alentejo | 4,538 | 653,016 | 5 | 1,048 | 4 | 847 | 19 | 1,520 | 15 | 7,595 | 4,495 | 642,006 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 4,713 | 205,264 | 0 | 0 | 0 | 0 | 6 | 1,431 | 4,691 | 201,061 | 16 | 2,772 |

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

| Region | Number of animals serologically tested under investigations of suspect cases | Number of suspended herds under investigations of suspect cases | Number of seropositive animals under investigations of suspect cases | Number of animals positive to BST under investigations of suspect cases | Number of animals positive in microbiological testing under investigations of suspect cases | Number of herds with status officially free | Number of infected herds | Total number of animals | Number of herds tested under surveillance | Number of animals tested under surveillance | Total number of herds | Number of infected herds tested under surveillance | Number of herds tested under surveillance by bulk milk | Number of animals or pools tested under surveillance by bulk milk | Number of infected herds tested under surveillance by bulk milk | Number of notified abortions whatever cause | Number of isolations of Brucella infections | Number of abortions due to Brucella abortus | Number of animals tested by microbiology under investigations of suspect cases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PORTUGAL | 0 | 0 | 0 | 0 | 0 | 2,484 | 0 | 70,614 | 717 | 11,055 | 2,484 | 0 | 101 | 1,798 | 0 | 4 | 0 | 0 | 0 |
| Algarve (NUTS level 2) | 0 | 0 | 0 | 0 | 0 | 308 | 0 | 7,757 | 73 | 1,666 | 308 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 0 | 0 | 0 | 0 | 0 | 2,176 | 0 | 62,857 | 644 | 9,389 | 2,176 | 0 | 101 | 1,798 | 0 | 4 | 0 | 0 | 0 |

## 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 |
|---|---|---|---|---|---|---|---|
| PORTUGAL | 2,487,280 | 1,644,739 | 1,512,820 | 1,512,820 | 1,588 | 1,389 | 1,420 |
| CONTINENTE | 2,487,280 | 1,644,739 | 1,512,820 | 1,512,820 | 1,588 | 1,389 | 1,420 |

## 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 |
|---|---|---|---|---|---|---|
| PORTUGAL | 341 | 3 | 56,348 | 56,216 | 54,550 | 396 |
| CONTINENTE | 341 | 3 | 56,348 | 56,216 | 54,550 | 396 |

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

| Region | Total number of herds under the program, at the end of the period | Total number of animals under the program, 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PORTUGAL | 56,216 | 2,463,567 | 52 | 8,339 | 67 | 8,866 | 1,134 | 39,386 | 5,527 | 321,759 | 49,436 | 2,085,217 |
| CONTINENTE | 56,216 | 2,463,567 | 52 | 8,339 | 67 | 8,866 | 1,134 | 39,386 | 5,527 | 321,759 | 49,436 | 2,085,217 |

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

| Region | Number of animals serologically tested under investigations of suspect cases | Number of suspended herds under investigations of suspect cases | Number of seropositive animals under investigations of suspect cases | Number of animals positive in microbiological testing under investigations of suspect cases | Number of herds with status officially free | Number of infected herds | Total number of animals | Number of herds tested under surveillance | Number of animals tested under surveillance | Total number of herds | Number of infected herds tested under surveillance | Number of animals tested by microbiology under investigations of suspect cases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PORTUGAL | 111 | 3 | 7 | 0 | 788 | 0 | 9,619 | 248 | 2,691 | 788 | 0 | 7 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 111 | 3 | 7 | 0 | 788 | 0 | 9,619 | 248 | 2,691 | 788 | 0 | 7 |

## DISEASE STATUS TABLES

### 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 |
|---|---|---|---|---|---|---|---|
| PORTUGAL | 1,687,613 | 1,098,845 | 1,086,122 | 1,086,122 | 537 | 538 | 815 |
| Norte | 355,567 | 197,352 | 197,343 | 197,343 | 66 | 65 | 219 |
| Centro (PT) | 166,322 | 133,835 | 133,782 | 133,782 | 95 | 92 | 93 |
| Lisboa | 186,611 | 95,298 | 94,981 | 94,981 | 44 | 32 | 136 |
| Alentejo | 710,992 | 617,214 | 604,870 | 604,870 | 331 | 349 | 367 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 268,121 | 55,146 | 55,146 | 55,146 | 1 | 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 |
|---|---|---|---|---|---|---|
| PORTUGAL | 61 | 3 | 41,236 | 37,516 | 31,552 | 87 |
| Norte | 12 | 2 | 19,376 | 17,083 | 16,653 | 14 |
| Centro (PT) | 5 | 0 | 7,981 | 7,537 | 7,312 | 12 |
| Lisboa | 4 | 1 | 2,264 | 1,469 | 1,417 | 5 |
| Alentejo | 39 | 0 | 4,726 | 4,538 | 4,431 | 55 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 1 | 0 | 6,889 | 6,889 | 1,739 | 1 |

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

| Region | Total number of herds under the program, at the end of the period | Total number of animals under the program, 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 officially free, at the end of the period | Number of animals with status officially free, at the end of the period |
|---|---|---|---|---|---|---|---|---|---|---|
| PORTUGAL | 37,516 | 1,509,159 | 10 | 1,728 | 58 | 9,500 | 100 | 5,187 | 37,348 | 1,492,744 |
| Norte | 17,083 | 296,423 | 0 | 0 | 9 | 365 | 18 | 172 | 17,056 | 295,886 |
| Centro (PT) | 7,537 | 158,648 | 4 | 288 | 10 | 1,761 | 29 | 1,052 | 7,494 | 155,547 |
| Lisboa | 1,469 | 132,951 | 0 | 0 | 2 | 208 | 20 | 371 | 1,447 | 132,372 |
| Alentejo | 4,538 | 653,016 | 6 | 1,440 | 37 | 7,166 | 29 | 3,332 | 4,466 | 641,078 |
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | 6,889 | 268,121 | 0 | 0 | 0 | 0 | 4 | 260 | 6,885 | 267,861 |

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

| Region | Number of herds with status officially free | Number of infected herds | Total number of animals | Interval between routine tuberculin tests | Number of animals tested with tuberculin routine testing | Number of animals with suspicious lesions of tuberculosis examined and submitted to histopathological and bacteriological examinations | Number of animals detected positive in bacteriological examination | Total number of herds |
|---|---|---|---|---|---|---|---|---|
| PORTUGAL | 307 | 1 | 7,757 | | 1,909 | 1 | 1 | 308 |
| Algarve (NUTS level 2) | 307 | 1 | 7,757 | 48 | 1,909 | 1 | 1 | 308 |

## PREVALENCE TABLES

### Table Brucella:BRUCELLA in food

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Cheeses, made from mixed milk from cows, sheep and/or goats - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Microbiological tests | 2 | 0 | Brucella | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Microbiological tests | 2 | 0 | Brucella | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Microbiological tests | 9 | 0 | Brucella | 0 |
| | Milk, cows' - raw milk - Farm - Portugal - food sample - milk - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | Microbiological tests | 2 | 0 | Brucella | 0 |
| | Milk, goats' - raw milk - Farm - Portugal - food sample - milk - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | Microbiological tests | 4 | 0 | Brucella | 0 |
| | Milk, sheep's - raw milk - Farm - Portugal - food sample - milk - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | Microbiological tests | 10 | 0 | Brucella | 0 |

## Table Calicivirus:CALICIVIRUS in food

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Fruits - non-pre-cut - frozen - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Not Available | 5 | 0 | Norovirus | 0 |

**Table Campylobacter:CAMPYLOBACTER in food**

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Meat from bovine animals - carcase - chilled - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 15 | 0 | Campylobacter | 0 |
| | Meat from bovine animals - fresh - chilled - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 37 | 1 | Campylobacter, unspecified sp. | 1 |
| | Meat from bovine animals - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 17 | 0 | Campylobacter | 0 |
| | Meat from bovine animals - minced meat - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 9 | 0 | Campylobacter | 0 |
| | Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 4 | 3 | Campylobacter coli | 1 |
| | | | | | | | | Campylobacter jejuni | 1 |
| | | | | | | | | Campylobacter, unspecified sp. | 1 |
| | Meat from broilers (Gallus gallus) - fresh - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 27 | 9 | Campylobacter coli | 6 |
| | | | | | | | | Campylobacter jejuni | 2 |
| | | | | | | | | Campylobacter, unspecified sp. | 1 |
| | Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 12 | 1 | Campylobacter coli | 1 |
| | Meat from goat - fresh - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 3 | 0 | Campylobacter | 0 |
| | Meat from pig - carcase - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 9 | 1 | Campylobacter coli | 1 |
| | Meat from pig - fresh - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 29 | 3 | Campylobacter coli | 1 |
| | | | | | | | | Campylobacter, unspecified sp. | 2 |
| | Meat from pig - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 22 | 2 | Campylobacter coli | 2 |
| | Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 6 | 0 | Campylobacter | 0 |
| | Meat from sheep - fresh - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 6 | 1 | Campylobacter jejuni | 1 |
| | Meat from turkey - fresh - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 11 | 3 | Campylobacter coli | 1 |
| | | | | | | | | Campylobacter, unspecified sp. | 2 |
| | Meat from turkey - meat preparation - intended to be eaten cooked - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 7 | 2 | Campylobacter, unspecified sp. | 2 |
| | Meat, mixed meat - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | Detection method presence in x g | 11 | 0 | Campylobacter | 0 |

**Table Cronobacter:CRONOBACTER in food**

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Infant formula - ready-to-eat - Hospital or medical care facility - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 10 | Gram | ISO/TS 22964:2006 (IDF/RM 210: 2006) Cronobacter spp. (Enterobacter sakazakii) | 17 | 0 | Cronobacter | 0 |

| Area of sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | total units tested | total units positive | Zoonoses | ANTH | VTX | AG | N units positive |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Juice - fruit juice - unpasteurised - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 4 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |
| | Meat from bovine animals - carcase - chilled - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 11 | 1 | VTEC O157 | H7 | Verotoxin production, VT1 | eae negative | 1 |
| | Meat from bovine animals - fresh - chilled - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 23 | 1 | VTEC O103 | H-antigen unknown | Verotoxin production, toxin type unknown | Adhesion genes not investigated | 1 |
| | Meat from bovine animals - fresh - frozen - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 15 | 1 | VTEC other than O157 O26 O103 O111 O145 | H-antigen unknown | VT2, gene identified, subtype unspecified | eae negative | 1 |
| | Meat from bovine animals - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 14 | 2 | VTEC O145 | H-antigen unknown | Verotoxin production, toxin type unknown | Adhesion genes not investigated | 1 |
| | | | | | | | | VTEC O157 | H-antigen unknown | Verotoxin production, toxin type unknown | Adhesion genes not investigated | 1 |
| | Meat from bovine animals - minced meat - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 15 | 1 | VTEC O103 | H-antigen unknown | Verotoxin production, toxin type unknown | Adhesion genes not investigated | 1 |
| | Meat from pig - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 35 | 2 | VTEC O145 | H-antigen unknown | Verotoxin production, toxin type unknown | eae negative | 1 |
| | | | | | | | | VTEC O157 | H-antigen unknown | Verotoxin production, VT1 | eae negative | 1 |
| | Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 1 | 1 | VTEC O26 | H-antigen unknown | Verotoxin production, toxin type unknown | Adhesion genes not investigated | 1 |
| | Meat from pig - minced meat - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 7 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |
| | Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 46 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |
| | Other processed food products and prepared dishes - vegetable based dishes - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 16 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |
| | Ready-to-eat salads - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 10 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |

| Area of sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | total units tested | total units positive | Zoonoses | ANTH | VTX | AG | N units positive |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Seeds, sprouted - ready-to-eat - Farm - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 4 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |
| | Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | In house real time PCR methods based on ISO/TS 13136:2012 | 5 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |
| | Seeds, sprouted - ready-to-eat - Retail - Spain - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | In house real time PCR methods based on ISO/TS 13136:2012 | 5 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |
| | Vegetables - pre-cut - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO/TS 13136:2012 (including the EU-RL adaptation for O104:H4) | 12 | 0 | Verocytotoxigenic E. coli (VTEC) | Not Available | Not Available | Not Available | 0 |

## Table FLAVIVIRUS in animal

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Vaccination status | Method | Total units tested | Total units positive | Zoonoses | | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| PORTUGAL | Solipeds, domestic - horses - Farm - Not Available - animal sample - blood - Monitoring - active - Official sampling - Suspect sampling | animal | No | Enzyme-linked immunosorbent assay (ELISA) | 50 | 3 | | West Nile virus | 3 |
| CONTINENTE | Solipeds, domestic - horses - Farm - Not Available - animal sample - blood - Monitoring - active - Official sampling - Suspect sampling | animal | No | Enzyme-linked immunosorbent assay (ELISA) | 50 | 3 | | West Nile virus | 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 | Fish - cooked - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | 9 | 0 | <= 100 | Histamine | 9 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 9 | 0 |
| | | | | | | | >200 | Histamine | 9 | 0 |
| | Fish - cooked - frozen - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | 9 | 0 | <= 100 | Histamine | 9 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 9 | 0 |
| | | | | | | | >200 | Histamine | 9 | 0 |
| | Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | 29 | 1 | <= 100 | Histamine | 29 | 8 |
| | | | | | | | >100 TO <= 200 | Histamine | 29 | 0 |
| | | | | | | | >200 | Histamine | 29 | 1 |
| | Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | 72 | 0 | <= 100 | Histamine | 72 | 12 |
| | | | | | | | >100 TO <= 200 | Histamine | 72 | 0 |
| | | | | | | | >200 | Histamine | 72 | 0 |
| | Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Retail - Mauritius - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | 9 | 0 | <= 100 | Histamine | 9 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 9 | 0 |
| | | | | | | | >200 | Histamine | 9 | 0 |
| | Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | 90 | 0 | <= 100 | Histamine | 90 | 6 |
| | | | | | | | >100 TO <= 200 | Histamine | 90 | 0 |
| | | | | | | | >200 | Histamine | 90 | 0 |
| | Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme maturated - Retail - Spain - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | 9 | 0 | <= 100 | Histamine | 9 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 9 | 0 |
| | | | | | | | >200 | Histamine | 9 | 0 |
| | Fish - raw - frozen - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 1 | 0 | <= 100 | Histamine | 1 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 1 | 0 |
| | | | | | | | >200 | Histamine | 1 | 0 |
| | Fish - raw - frozen - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | 9 | 9 | <= 100 | Histamine | 9 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 9 | 0 |
| | | | | | | | >200 | Histamine | 9 | 9 |
| | Fish - raw - frozen - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 2 | 0 | <= 100 | Histamine | 2 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 2 | 0 |
| | | | | | | | >200 | Histamine | 2 | 0 |
| | Fish - raw - frozen - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 10 | Gram | 4 | 0 | <= 100 | Histamine | 4 | 2 |
| | | | | | | | >100 TO <= 200 | Histamine | 4 | 0 |
| | | | | | | | >200 | Histamine | 4 | 0 |
| | Fish - raw - frozen - Wholesale - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 2 | 0 | <= 100 | Histamine | 2 | 0 |
| | | | | | | | >100 TO <= 200 | Histamine | 2 | 0 |
| | | | | | | | >200 | Histamine | 2 | 0 |
| | Fish - raw - frozen - Wholesale - Spain - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | 18 | 0 | <= 100 | Histamine | 18 | 1 |
| | | | | | | | >100 TO <= 200 | Histamine | 18 | 0 |
| | | | | | | | >200 | Histamine | 18 | 0 |
| | Meat from bovine animals - fresh - frozen - Retail - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 1 | 0 | <= 100 | Histamine | 1 | 0 |
| | Meat from bovine animals - fresh - frozen - Wholesale - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 3 | 0 | <= 100 | Histamine | 3 | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Total units tested | Total units positive | Method | Zoonoses | N of units tested | N of units positive |
|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Meat from broilers (Gallus gallus) - fresh - frozen - Wholesale - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 4 | 0 | <= 100 | Histamine | 4 | 0 |
| | Meat from poultry, unspecified - offal - unspecified - frozen - Retail - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 1 | 0 | <= 100 | Histamine | 1 | 0 |
| | Meat from poultry, unspecified - offal - unspecified - frozen - Wholesale - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | 5 | 0 | <= 100 | Histamine | 5 | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Total units tested | Total units positive | Method | Zoonoses | N of units tested | N of units positive |
|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Bakery products - desserts - containing heat-treated cream - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Bakery products - desserts - containing raw eggs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 30 | 0 | <= 100 | Listeria monocytogenes | 30 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 30 | 0 |
| | Bakery products - desserts - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 1 | 0 | <= 100 | Listeria monocytogenes | 1 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 1 | 0 |
| | Bakery products - desserts - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 60 | 0 | <= 100 | Listeria monocytogenes | 60 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 60 | 0 |
| | Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 44 | 0 | <= 100 | Listeria monocytogenes | 44 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 44 | 0 |
| | Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 44 | 0 | detection | Listeria monocytogenes | 44 | 0 |
| | Cheeses made from cows' milk - fresh - made from pasteurised milk - Retail - Germany - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Cheeses made from cows' milk - fresh - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Cheeses made from cows' milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Cheeses made from cows' milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 10 | 0 | detection | Listeria monocytogenes | 10 | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 26 | 0 | <= 100 | Listeria monocytogenes | 26 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 26 | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 26 | 0 | detection | Listeria monocytogenes | 26 | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Retail - Italy - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 30 | 0 | <= 100 | Listeria monocytogenes | 30 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 30 | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Retail - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Retail - Switzerland - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 26 | 0 | <= 100 | Listeria monocytogenes | 26 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 26 | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Total units tested | Total units positive | Method | Zoonoses | N of units tested | N of units positive |
|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 26 | 0 | detection | Listeria monocytogenes | 26 | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 30 | 0 | <= 100 | Listeria monocytogenes | 30 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 30 | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 10 | 0 | detection | Listeria monocytogenes | 10 | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Italy - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Cheeses made from goats' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 12 | 0 | <= 100 | Listeria monocytogenes | 12 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 12 | 0 |
| | Cheeses made from goats' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 12 | 0 | detection | Listeria monocytogenes | 12 | 0 |
| | Cheeses made from goats' milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | <= 100 | Listeria monocytogenes | 2 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 2 | 0 |
| | Cheeses made from goats' milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Cheeses made from goats' milk - hard - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | detection | Listeria monocytogenes | 4 | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | <= 100 | Listeria monocytogenes | 2 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 2 | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Cheeses made from sheep's milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 17 | 0 | <= 100 | Listeria monocytogenes | 17 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 17 | 0 |
| | Cheeses made from sheep's milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 17 | 0 | detection | Listeria monocytogenes | 17 | 0 |
| | Cheeses made from sheep's milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | <= 100 | Listeria monocytogenes | 2 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 2 | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Total units tested | Total units positive | Method | Zoonoses | N of units tested | N of units positive |
|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Cheeses made from sheep's milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Cheeses made from sheep's milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 3 | 0 | <= 100 | Listeria monocytogenes | 3 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 3 | 0 |
| | Cheeses made from sheep's milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 3 | 0 | detection | Listeria monocytogenes | 3 | 0 |
| | Cheeses made from sheep's milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | 35 | 0 | <= 100 | Listeria monocytogenes | 35 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 35 | 0 |
| | Cheeses made from sheep's milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | 35 | 0 | detection | Listeria monocytogenes | 35 | 0 |
| | Cheeses made from sheep's milk - hard - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 55 | 2 | <= 100 | Listeria monocytogenes | 55 | 2 |
| | | | | | | | >100 | Listeria monocytogenes | 55 | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 55 | 2 | detection | Listeria monocytogenes | 55 | 2 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - France - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 15 | 0 | <= 100 | Listeria monocytogenes | 15 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 15 | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | 1 | 0 | <= 100 | Listeria monocytogenes | 1 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 1 | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | 1 | 0 | detection | Listeria monocytogenes | 1 | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 95 | 11 | <= 100 | Listeria monocytogenes | 95 | 2 |
| | | | | | | | >100 | Listeria monocytogenes | 95 | 9 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 3 | 1 | <= 100 | Listeria monocytogenes | 3 | 1 |
| | | | | | | | >100 | Listeria monocytogenes | 3 | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 3 | 1 | detection | Listeria monocytogenes | 3 | 1 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - hard - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | detection | Listeria monocytogenes | 4 | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Total units tested | Total units positive | Method | Zoonoses | N of units tested | N of units positive |
|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 10 | 0 | detection | Listeria monocytogenes | 10 | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Crustaceans - prawns - cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Crustaceans - prawns - shelled, shucked and cooked - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | detection | Listeria monocytogenes | 5 | 0 |
| | Crustaceans - shrimps - cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Crustaceans - shrimps - cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 20 | 0 | <= 100 | Listeria monocytogenes | 20 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 20 | 0 |
| | Crustaceans - unspecified - cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 3 | 0 | detection | Listeria monocytogenes | 3 | 0 |
| | Dairy products (excluding cheeses) - dairy desserts - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 55 | 0 | <= 100 | Listeria monocytogenes | 55 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 55 | 0 |
| | Dairy products (excluding cheeses) - dairy desserts - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Dairy products (excluding cheeses) - ice-cream - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 90 | 0 | <= 100 | Listeria monocytogenes | 90 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 90 | 0 |
| | Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 20 | 0 | <= 100 | Listeria monocytogenes | 20 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 20 | 0 |
| | Fish - smoked - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | detection | Listeria monocytogenes | 5 | 0 |
| | Fruits - pre-cut - ready-to-eat - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | --- | Gram | 38 | 0 | <= 100 | Listeria monocytogenes | 38 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 38 | 0 |
| | Fruits - pre-cut - ready-to-eat - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | 38 | 0 | detection | Listeria monocytogenes | 38 | 0 |
| | Fruits - pre-cut - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | <= 100 | Listeria monocytogenes | 2 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 2 | 0 |
| | Fruits - pre-cut - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Fruits - pre-cut - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 25 | 0 | <= 100 | Listeria monocytogenes | 25 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 25 | 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 | Infant formula - ready-to-eat - Hospital or medical care facility - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 1 | Millilitre | 17 | 0 | <= 100 | Listeria monocytogenes | 17 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 17 | 0 |
| | Infant formula - ready-to-eat - Hospital or medical care facility - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | 17 | 0 | detection | Listeria monocytogenes | 17 | 0 |
| | Juice - fruit juice - pasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | 2 | 0 | <= 100 | Listeria monocytogenes | 2 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 2 | 0 |
| | Juice - fruit juice - pasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Juice - fruit juice - unpasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | 4 | 0 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Juice - fruit juice - unpasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | 4 | 0 | detection | Listeria monocytogenes | 4 | 0 |
| | Juice - vegetable juice - unpasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | 2 | 0 | <= 100 | Listeria monocytogenes | 2 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 2 | 0 |
| | Juice - vegetable juice - unpasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Meat from bovine animals - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 6 | 0 | <= 100 | Listeria monocytogenes | 6 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 6 | 0 |
| | Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 6 | 0 | detection | Listeria monocytogenes | 6 | 0 |
| | Meat from pig - meat products - cooked ham - sliced - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | --- | Gram | 4 | 1 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Meat from pig - meat products - cooked ham - sliced - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | 4 | 1 | detection | Listeria monocytogenes | 4 | 1 |
| | Meat from pig - meat products - cooked ham - sliced - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 20 | 0 | <= 100 | Listeria monocytogenes | 20 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 20 | 0 |
| | Meat from pig - meat products - cooked, ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 131 | 13 | <= 100 | Listeria monocytogenes | 131 | 12 |
| | | | | | | | >100 | Listeria monocytogenes | 131 | 1 |
| | Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 131 | 13 | detection | Listeria monocytogenes | 131 | 13 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Total units tested | Total units positive | Method | Zoonoses | N of units tested | N of units positive |
|---|---|---|---|---|---|---|---|---|---|---|
| Not Available | Meat from pig - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | 15 | 14 | detection | Listeria monocytogenes | 15 | 14 |
| | Meat from pig - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | 2 | 0 | <= 100 | Listeria monocytogenes | 2 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 2 | 0 |
| | Meat from pig - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | 2 | 0 | detection | Listeria monocytogenes | 2 | 0 |
| | Meat from pig - meat products - fermented sausages - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 2 | <= 100 | Listeria monocytogenes | 10 | 2 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Meat from pig - meat products - raw but intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Meat from pig - meat products - raw but intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 5 | 0 | detection | Listeria monocytogenes | 5 | 0 |
| | Meat from pig - meat products - raw ham - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Meat from pig - meat products - unspecified, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | detection | Listeria monocytogenes | 5 | 0 |
| | Meat from pig - meat products - unspecified, ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Meat from pig - offal - Processing plant - Not Available - food sample - Surveillance - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | 10 | 5 | detection | Listeria monocytogenes | 10 | 5 |
| | Meat from turkey - meat products - cooked, ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 40 | 0 | <= 100 | Listeria monocytogenes | 40 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 40 | 0 |
| | Meat from turkey - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 8 | 0 | <= 100 | Listeria monocytogenes | 8 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 8 | 0 |
| | Meat from turkey - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 8 | 0 | detection | Listeria monocytogenes | 8 | 0 |
| | Meat, mixed meat - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Meat, mixed meat - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | detection | Listeria monocytogenes | 4 | 0 |
| | Molluscan shellfish - cooked - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 25 | 0 | detection | Listeria monocytogenes | 25 | 0 |
| | Other food of non-animal origin - Processing plant - Portugal - food sample - Surveillance - Industry sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | detection | Listeria monocytogenes | 4 | 0 |
| | Other processed food products and prepared dishes - egg based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Other processed food products and prepared dishes - fish and seafood based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 75 | 1 | <= 100 | Listeria monocytogenes | 75 | 1 |
| | | | | | | | >100 | Listeria monocytogenes | 75 | 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 | Other processed food products and prepared dishes - meat based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 90 | 0 | <= 100 | Listeria monocytogenes | 90 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 90 | 0 |
| | Other processed food products and prepared dishes - meat based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | 4 | 0 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Other processed food products and prepared dishes - sandwiches - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | --- | Gram | 30 | 0 | <= 100 | Listeria monocytogenes | 30 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 30 | 0 |
| | Other processed food products and prepared dishes - sandwiches - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | 30 | 0 | detection | Listeria monocytogenes | 30 | 0 |
| | Other processed food products and prepared dishes - sandwiches - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Other processed food products and prepared dishes - sandwiches - with meat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 50 | 0 | <= 100 | Listeria monocytogenes | 50 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 50 | 0 |
| | Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | --- | Gram | 14 | 0 | <= 100 | Listeria monocytogenes | 14 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 14 | 0 |
| | | | | | 1012 | 2 | <= 100 | Listeria monocytogenes | 1,012 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 1,012 | 0 |
| | Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | 1012 | 2 | detection | Listeria monocytogenes | 1,012 | 2 |
| | Other processed food products and prepared dishes - unspecified - ready-to-eat foods - frozen - Processing plant - Portugal - food sample - Surveillance - Industry sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | detection | Listeria monocytogenes | 5 | 0 |
| | Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Other processed food products and prepared dishes - vegetable based dishes - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | --- | Gram | 249 | 3 | <= 100 | Listeria monocytogenes | 249 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 249 | 0 |
| | Other processed food products and prepared dishes - vegetable based dishes - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | 249 | 3 | detection | Listeria monocytogenes | 249 | 3 |
| | Other processed food products and prepared dishes - vegetable based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Ready-to-eat salads - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | --- | Gram | 110 | 3 | <= 100 | Listeria monocytogenes | 110 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 110 | 0 |
| | Ready-to-eat salads - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | 110 | 3 | detection | Listeria monocytogenes | 110 | 3 |
| | Ready-to-eat salads - containing mayonnaise - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 15 | 0 | <= 100 | Listeria monocytogenes | 15 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 15 | 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 | Ready-to-eat salads - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 5 | 0 | <= 100 | Listeria monocytogenes | 5 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 5 | 0 |
| | Ready-to-eat salads - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | 1 | 0 | <= 100 | Listeria monocytogenes | 1 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 1 | 0 |
| | Ready-to-eat salads - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 30 | 0 | <= 100 | Listeria monocytogenes | 30 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 30 | 0 |
| | Sauce and dressings - mayonnaise - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 35 | 0 | <= 100 | Listeria monocytogenes | 35 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 35 | 0 |
| | Sauce and dressings - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 95 | 0 | <= 100 | Listeria monocytogenes | 95 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 95 | 0 |
| | Seeds, sprouted - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | <= 100 | Listeria monocytogenes | 4 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 4 | 0 |
| | Seeds, sprouted - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 4 | 0 | detection | Listeria monocytogenes | 4 | 0 |
| | Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 15 | 0 | <= 100 | Listeria monocytogenes | 15 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 15 | 0 |
| | Soups - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 40 | 0 | <= 100 | Listeria monocytogenes | 40 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 40 | 0 |
| | Spices and herbs - dried - irradiated - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |
| | Surimi - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 15 | 0 | detection | Listeria monocytogenes | 15 | 0 |
| | Vegetables - pre-cut - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 12 | 0 | <= 100 | Listeria monocytogenes | 12 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 12 | 0 |
| | Vegetables - pre-cut - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | 12 | 0 | detection | Listeria monocytogenes | 12 | 0 |
| | Vegetables - pre-cut - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | 10 | 0 | <= 100 | Listeria monocytogenes | 10 | 0 |
| | | | | | | | >100 | Listeria monocytogenes | 10 | 0 |

## Table Lyssavirus:LYSSAVIRUS in animal

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Method | Sampling unit | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|
| PORTUGAL | Dogs - Official kennel - Not Available - animal sample - Surveillance - Official sampling - Suspect sampling | Not Available | animal | 1 | 0 | Lyssavirus | 0 |
| | Foxes - wild - Natural habitat - Not Available - animal sample - Surveillance - Official sampling - Convenient sampling | Not Available | animal | 1 | 0 | Lyssavirus | 0 |
| | Foxes - wild - Natural habitat - Not Available - animal sample - Surveillance - Official sampling - Suspect sampling | Not Available | animal | 1 | 0 | Lyssavirus | 0 |

**Table Salmonella:SALMONELLA in animal**

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | N of flocks under control programme | Target verification | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Gallus gallus (fowl) - breeding flocks for broiler production line - adult - Farm - Portugal - Not Available - Control and eradication programmes - Official and industry sampling - Census | herd/flock | 476 | Y | Not Available | 476 | 3 | Salmonella 1,4,12:i:- | 2 |
| | | | | | | | | Salmonella Kirkee | 1 |
| | Gallus gallus (fowl) - breeding flocks for egg production line - adult - Farm - Portugal - Not Available - Control and eradication programmes - Official and industry sampling - Census | herd/flock | 22 | Y | Not Available | 22 | 0 | Salmonella | 0 |
| | Gallus gallus (fowl) - broilers - before slaughter - Farm - Portugal - Not Available - Control and eradication programmes - Industry sampling - Census | herd/flock | 10934 | N | Not Available | 10934 | 45 | Salmonella 4,5,12:i:- | 4 |
| | | | | | | | | Salmonella Anatum | 1 |
| | | | | | | | | Salmonella Brandenburg | 1 |
| | | | | | | | | Salmonella Cerro | 5 |
| | | | | | | | | Salmonella Havana | 11 |
| | | | | | | | | Salmonella Kirkee | 1 |
| | | | | | | | | Salmonella Lexington | 2 |
| | | | | | | | | Salmonella Llandoff | 1 |
| | | | | | | | | Salmonella Madelia | 1 |
| | | | | | | | | Salmonella Newport | 1 |
| | | | | | | | | Salmonella Other serovars | 15 |
| | | | | | | | | Salmonella Typhimurium | 1 |
| | | | | | | | | Salmonella Virchow | 1 |
| | Gallus gallus (fowl) - broilers - before slaughter - Farm - Portugal - Not Available - Control and eradication programmes - Official and industry sampling - Census | herd/flock | 11011 | Y | Not Available | 11011 | 51 | Salmonella 4,5,12:i:- | 6 |
| | | | | | | | | Salmonella Anatum | 1 |
| | | | | | | | | Salmonella Brandenburg | 1 |
| | | | | | | | | Salmonella Cerro | 5 |
| | | | | | | | | Salmonella Havana | 15 |
| | | | | | | | | Salmonella Kirkee | 1 |
| | | | | | | | | Salmonella Lexington | 2 |
| | | | | | | | | Salmonella Llandoff | 1 |
| | | | | | | | | Salmonella Madelia | 1 |
| | | | | | | | | Salmonella Newport | 1 |
| | | | | | | | | Salmonella Other serovars | 15 |
| | | | | | | | | Salmonella Typhimurium | 1 |
| | | | | | | | | Salmonella Virchow | 1 |
| | Gallus gallus (fowl) - broilers - before slaughter - Farm - Portugal - Not Available - Control and eradication programmes - Official sampling - Census | herd/flock | 126 | N | Not Available | 126 | 6 | Salmonella 4,5,12:i:- | 2 |
| | | | | | | | | Salmonella Havana | 4 |
| | Gallus gallus (fowl) - laying hens - adult - Farm - Portugal - Not Available - Control and eradication programmes - Official and industry sampling - Census | herd/flock | 464 | Y | Not Available | 464 | 39 | Salmonella 4,5,12:i:- | 1 |
| | | | | | | | | Salmonella Agona | 1 |
| | | | | | | | | Salmonella Brandenburg | 1 |
| | | | | | | | | Salmonella Bredeney | 1 |
| | | | | | | | | Salmonella Enteritidis | 6 |
| | | | | | | | | Salmonella Infantis | 10 |
| | | | | | | | | Salmonella Llandoff | 2 |
| | | | | | | | | Salmonella Mbandaka | 6 |
| | | | | | | | | Salmonella Montevideo | 2 |
| | | | | | | | | Salmonella Newport | 1 |
| | | | | | | | | Salmonella Ohio | 1 |
| | | | | | | | | Salmonella Ouakam | 1 |
| | | | | | | | | Salmonella Senftenberg | 1 |
| | | | | | | | | Salmonella Tennessee | 1 |
| | | | | | | | | Salmonella Typhimurium | 2 |
| | | | | | | | | Salmonella Virchow | 2 |
| | Turkeys - fattening flocks - before slaughter - Farm - Portugal - Not Available - Control and eradication programmes - Industry sampling - Census | herd/flock | 1196 | N | Not Available | 1196 | 5 | Salmonella | 5 |
| | | | | | | | | Salmonella 4,5,12:i:- | 4 |
| | | | | | | | | Salmonella Cerro | 1 |
| | Turkeys - fattening flocks - before slaughter - Farm - Portugal - Not Available - Control and eradication programmes - Official and industry sampling - Census | herd/flock | 1196 | Y | Not Available | 1196 | 5 | Salmonella 4,5,12:i:- | 4 |
| | | | | | | | | Salmonella Cerro | 1 |
| | Turkeys - fattening flocks - before slaughter - Farm - Portugal - Not Available - Control and eradication programmes - Official sampling - Census | herd/flock | 14 | N | Not Available | 14 | 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 | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Bakery products - desserts - containing raw cream - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Bakery products - desserts - containing raw eggs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 30 | 0 | Salmonella | 0 |
| | Bakery products - desserts - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 25 | 0 | Salmonella | 0 |
| | Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 14 | 0 | Salmonella | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 26 | 0 | Salmonella | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Retail - Italy - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 30 | 0 | Salmonella | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Retail - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Retail - Switzerland - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 11 | 0 | Salmonella | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 10 | 0 | Salmonella | 0 |
| | Cheeses made from goats' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 12 | 0 | Salmonella | 0 |
| | Cheeses made from goats' milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Cheeses made from goats' milk - hard - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 10 | 0 | Salmonella | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 4 | 1 | Salmonella spp., unspecified | 1 |
| | Cheeses made from goats' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Cheeses made from sheep's milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 17 | 0 | Salmonella | 0 |
| | Cheeses made from sheep's milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Cheeses made from sheep's milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 55 | 0 | Salmonella | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 40 | 0 | Salmonella | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - France - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 15 | 0 | Salmonella | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 100 | 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 | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Cheeses, made from mixed milk from cows, sheep and/or goats - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 3 | 0 | Salmonella | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - hard - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 4 | 0 | Salmonella | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 10 | 1 | Salmonella IIIb 61:k:1,5,7 | 1 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 15 | 0 | Salmonella | 0 |
| | Crustaceans - prawns - cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Crustaceans - prawns - shelled, shucked and cooked - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 5 | 0 | Salmonella | 0 |
| | Crustaceans - shrimps - cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Crustaceans - unspecified - cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 3 | 0 | Salmonella | 0 |
| | Dairy products (excluding cheeses) - dairy desserts - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Dairy products (excluding cheeses) - dairy desserts - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 5 | 0 | Salmonella | 0 |
| | Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 0 | Salmonella | 0 |
| | Egg products - liquid - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 6 | 0 | Salmonella | 0 |
| | Egg products - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 15 | 0 | Salmonella | 0 |
| | Eggs - table eggs - Packing centre - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 45 | 0 | Salmonella | 0 |
| | Eggs - table eggs - whole - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 10 | 0 | Salmonella | 0 |
| | Fruits - pre-cut - ready-to-eat - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 38 | 0 | Salmonella | 0 |
| | Fruits - pre-cut - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Infant formula - ready-to-eat - Hospital or medical care facility - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 17 | 0 | Salmonella | 0 |
| | Juice - fruit juice - pasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Juice - fruit juice - unpasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | ISO 6579:2002 Salmonella | 4 | 0 | Salmonella | 0 |
| | Juice - vegetable juice - unpasteurised - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Millilitre | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Live bivalve molluscs - mussels - depurated - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - mussels - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - oysters - depurated - Processing plant - Portugal - food sample - Monitoring - HACCP and own check - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 5 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - oysters - depurated - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 2 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - oysters - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 4 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 35 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 35 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 51 | 1 | Salmonella spp., unspecified | 1 |
| | Live bivalve molluscs - Retail - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Live bivalve molluscs - unspecified - depurated - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 8 | 0 | Salmonella | 0 |
| | Meat from bovine animals - carcase - chilled - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 22 | 0 | Salmonella | 0 |
| | Meat from bovine animals - fresh - chilled - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 48 | 0 | Salmonella | 0 |
| | Meat from bovine animals - fresh - frozen - Wholesale - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 4 | 0 | Salmonella | 0 |
| | Meat from bovine animals - meat preparation - intended to be eaten cooked - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from bovine animals - meat preparation - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 25 | 0 | Salmonella | 0 |
| | Meat from bovine animals - meat preparation - intended to be eaten cooked - frozen - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from bovine animals - meat preparation - intended to be eaten cooked - frozen - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 2 | Salmonella | 0 |
| | | | | | | | | Salmonella spp., unspecified | 2 |
| | Meat from bovine animals - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 23 | 1 | Salmonella Dublin | 1 |
| | Meat from bovine animals - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from bovine animals - meat products - raw but intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 1 | 0 | Salmonella | 0 |
| | Meat from bovine animals - minced meat - intended to be eaten cooked - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 10 | 0 | Salmonella | 0 |
| | Meat from bovine animals - minced meat - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from bovine animals - minced meat - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 15 | 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 | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Meat from bovine animals and pig - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 95 | 16 | Salmonella | 0 |
| | | | | | | | | Salmonella 4,5,12:i:- | 1 |
| | | | | | | | | Salmonella Rissen | 5 |
| | | | | | | | | Salmonella Typhimurium | 10 |
| | Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 7 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - fresh - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 35 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - fresh - frozen - Wholesale - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 4 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - fresh - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 46 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 70 | 2 | Salmonella | 0 |
| | | | | | | | | Salmonella Typhimurium | 2 |
| | Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 15 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 8 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - meat products - raw but intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 9 | 0 | Salmonella | 0 |
| | Meat from broilers (Gallus gallus) - offal - unspecified - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 135 | 10 | Salmonella Heidelberg | 9 |
| | | | | | | | | Salmonella Newport | 1 |
| | Meat from duck - meat products - raw and intended to be eaten raw - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from goat - carcase - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 1 | 0 | Salmonella | 0 |
| | Meat from goat - fresh - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 7 | 0 | Salmonella | 0 |
| | Meat from pig - carcase - Slaughterhouse - Portugal - food sample - carcase swabs - Surveillance - based on Regulation 2073 - HACCP and own check - Objective sampling | single (food/feed) | 400 | Square centimetre | Not Available | 3233 | 39 | Salmonella spp., unspecified | 39 |
| | Meat from pig - carcase - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 17 | 1 | Salmonella Typhimurium | 1 |
| | Meat from pig - fresh - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 55 | 4 | Salmonella 4,5,12:i:- | 2 |
| | | | | | | | | Salmonella Derby | 1 |
| | | | | | | | | Salmonella Typhimurium | 1 |
| | Meat from pig - meat preparation - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 70 | 1 | Salmonella | 0 |
| | | | | | | | | Salmonella Derby | 1 |
| | Meat from pig - meat preparation - intended to be eaten cooked - chilled - Wholesale - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 10 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from pig - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 41 | 1 | Salmonella Muenchen | 1 |
| | Meat from pig - meat products - cooked ham - sliced - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 4 | 0 | Salmonella | 0 |
| | Meat from pig - meat products - cooked ham - sliced - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 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 | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Meat from pig - meat products - cooked, ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from pig - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 138 | 8 | Salmonella 4,12:i:- | 2 |
| | | | | | | | | Salmonella Derby | 1 |
| | | | | | | | | Salmonella Muenchen | 1 |
| | | | | | | | | Salmonella Rissen | 1 |
| | | | | | | | | Salmonella spp., unspecified | 2 |
| | | | | | | | | Salmonella Tennessee | 1 |
| | Meat from pig - meat products - fermented sausages - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 30 | 0 | Salmonella | 0 |
| | Meat from pig - meat products - meat specialities - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 0 | Salmonella | 0 |
| | Meat from pig - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from pig - meat products - raw but intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 72 | 0 | Salmonella | 0 |
| | Meat from pig - meat products - raw ham - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 10 | 0 | Salmonella | 0 |
| | Meat from pig - meat products - unspecified, ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from pig - minced meat - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 15 | 0 | Salmonella | 0 |
| | Meat from pig - minced meat - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 7 | 0 | Salmonella | 0 |
| | Meat from poultry, unspecified - meat preparation - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 45 | 0 | Salmonella | 0 |
| | Meat from poultry, unspecified - meat preparation - intended to be eaten cooked - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 5 | 0 | Salmonella | 0 |
| | Meat from poultry, unspecified - meat products - cooked, ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from poultry, unspecified - offal - unspecified - frozen - Retail - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 2 | 0 | Salmonella | 0 |
| | Meat from poultry, unspecified - offal - unspecified - frozen - Wholesale - Brazil - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 4 | 0 | Salmonella | 0 |
| | Meat from sheep - carcase - Slaughterhouse - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 8 | 0 | Salmonella | 0 |
| | Meat from sheep - fresh - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 8 | 0 | Salmonella | 0 |
| | Meat from turkey - carcase - Slaughterhouse - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 1 | 0 | Salmonella | 0 |
| | Meat from turkey - fresh - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat from turkey - fresh - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 16 | 0 | Salmonella | 0 |
| | Meat from turkey - meat preparation - intended to be eaten cooked - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 1 | Salmonella | 0 |
| | | | | | | | | Salmonella Kentucky | 1 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Meat from turkey - meat preparation - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 90 | 13 | Salmonella | 0 |
| | | | | | | | | Salmonella Coeln | 5 |
| | | | | | | | | Salmonella Newport | 5 |
| | | | | | | | | Salmonella spp., unspecified | 3 |
| | Meat from turkey - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 11 | 0 | Salmonella | 0 |
| | Meat from turkey - meat products - cooked, ready-to-eat - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 25 | 0 | Salmonella | 0 |
| | Meat from turkey - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 8 | 0 | Salmonella | 0 |
| | Meat from turkey - meat products - raw but intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 1 | 0 | Salmonella | 0 |
| | Meat from turkey - meat products - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 0 | Salmonella | 0 |
| | Meat, mixed meat - meat preparation - intended to be eaten cooked - chilled - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Meat, mixed meat - meat preparation - intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 9 | 0 | Salmonella | 0 |
| | Meat, mixed meat - meat products - cooked, ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 4 | 0 | Salmonella | 0 |
| | Meat, mixed meat - meat products - meat specialities - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 40 | 0 | Salmonella | 0 |
| | Meat, mixed meat - meat products - raw but intended to be eaten cooked - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 4 | 0 | Salmonella | 0 |
| | Molluscan shellfish - cooked - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 25 | 0 | Salmonella | 0 |
| | Other food of non-animal origin - Processing plant - Portugal - food sample - Surveillance - Industry sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 5 | 0 | Salmonella | 0 |
| | | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 14 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - egg based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - fish and seafood based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - meat based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 40 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - meat based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Selective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 3 | 0 | Salmonella | 0 |
| | | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - pasta based dishes - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 10 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - Processing plant - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 27 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - sandwiches - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 32 | 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 | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Other processed food products and prepared dishes - sandwiches - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - sandwiches - with meat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 30 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 1030 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - vegetable based dishes - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 249 | 0 | Salmonella | 0 |
| | Other processed food products and prepared dishes - vegetable based dishes - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Ready-to-eat salads - Catering - Portugal - food sample - Surveillance - HACCP and own check - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002/Amd 1:2007 | 110 | 0 | Salmonella | 0 |
| | Ready-to-eat salads - containing mayonnaise - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 15 | 0 | Salmonella | 0 |
| | Ready-to-eat salads - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Ready-to-eat salads - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Sauce and dressings - mayonnaise - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Sauce and dressings - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 5 | 0 | Salmonella | 0 |
| | Seeds, sprouted - ready-to-eat - Farm - Portugal - food sample - Surveillance - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 4 | 0 | Salmonella | 0 |
| | Seeds, sprouted - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 15 | 0 | Salmonella | 0 |
| | Vegetables - pre-cut - ready-to-eat - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 12 | 0 | Salmonella | 0 |
| | Vegetables - pre-cut - ready-to-eat - Restaurant or Cafe or Pub or Bar or Hotel or Catering service - Not Available - food sample - Surveillance - Official sampling - Selective sampling | single (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Vegetables - pre-cut - ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 40 | 0 | Salmonella | 0 |

**Table Salmonella:SALMONELLA in feed**

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Compound feedingstuffs for cattle - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 25 | 2 | Salmonella spp., unspecified | 2 |
| | Compound feedingstuffs for horses - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Compound feedingstuffs for pigs - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | ISO 6579:2002 Salmonella | 34 | 3 | Salmonella spp., unspecified | 3 |
| | Compound feedingstuffs for poultry (non specified) - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 3 | 0 | Salmonella | 0 |
| | Compound feedingstuffs for poultry, broilers - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 20 | 0 | Salmonella | 0 |
| | Compound feedingstuffs for poultry, laying hens - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 24 | 0 | Salmonella | 0 |
| | Compound feedingstuffs for rabbits - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 12 | 0 | Salmonella | 0 |
| | Compound feedingstuffs for sheep - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 17 | 0 | Salmonella | 0 |
| | Compound feedingstuffs for turkeys - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Compound feedingstuffs, not specified - final product - Feed mill - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 2 | 0 | Salmonella | 0 |
| | Feed material of cereal grain origin - barley derived - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Feed material of cereal grain origin - maize derived - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 11 | 0 | Salmonella | 0 |
| | Feed material of cereal grain origin - other cereal grain derived - by-products of brewing and distilling - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Feed material of cereal grain origin - other cereal grain derived - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 12 | 0 | Salmonella | 0 |
| | Feed material of cereal grain origin - rice derived - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 2 | 0 | Salmonella | 0 |
| | Feed material of land animal origin - feather meal - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Feed material of oil seed or fruit origin - palm kernel derived - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Feed material of oil seed or fruit origin - soya (bean) derived - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 2 | 0 | Salmonella | 0 |
| | Feed material of oil seed or fruit origin - sunflower seed derived - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Other feed material - forages and roughages - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |
| | Other feed material - miscellaneous - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 8 | 0 | Salmonella | 0 |
| | Other feed material - other plants - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Other feed material - yeast - Processing plant - Portugal - feed sample - Surveillance - Official sampling - Objective sampling | batch (food/feed) | 25 | Gram | Real-Time PCR (qualitative or quantitative) | 1 | 0 | Salmonella | 0 |

## Table Staphylococcal enterotoxins:STAPHYLOCOCCAL ENTEROTOXINS in food

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Sampling unit | Sample weight | Sample weight unit | Method | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|---|---|
| Not Available | Cheeses made from cows' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 11 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from cows' milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 1 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 11 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 3 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from goats' milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 12 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from goats' milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 2 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from goats' milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 1 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 4 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from goats' milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 2 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from sheep's milk - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 17 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from sheep's milk - hard - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 2 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from sheep's milk - hard - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 3 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 1 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses made from sheep's milk - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 53 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - fresh - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 2 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 4 | 0 | Staphylococcal enterotoxins | 0 |
| | Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from raw or low heat-treated milk - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 9 | 0 | Staphylococcal enterotoxins | 0 |
| | Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Portugal - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling | single (food/feed) | 25 | Gram | Immunofluorenscence assay tests (IFA) | 5 | 0 | Staphylococcal enterotoxins | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Method | Sampling unit | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|
| Not Available | Pigs - breeding animals - not raised under controlled housing conditions - sows and boars - Slaughterhouse - Spain - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 71 | 0 | Trichinella | 0 |
| | Pigs - breeding animals - raised under controlled housing conditions - sows and boars - Slaughterhouse - Spain - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 41 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Spain - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 120411 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Belgium - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 732 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Netherlands - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 157 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Spain - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 891489 | 0 | Trichinella | 0 |
| PORTUGAL | Pigs - breeding animals - not raised under controlled housing conditions - sows and boars - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 2175 | 0 | Trichinella | 0 |
| | Pigs - breeding animals - raised under controlled housing conditions - sows and boars - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 18317 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 61498 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 3288523 | 0 | Trichinella | 0 |
| | Solipeds, domestic - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 1001 | 0 | Trichinella | 0 |
| | Wild boars - wild - Game handling establishment - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 189 | 0 | Trichinella | 0 |
| | Wild boars - wild - Hunting - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 54 | 3 | Trichinella britovi | 3 |
| | Wild boars - wild - Hunting - Portugal - animal sample - organ/tissue - Surveillance - Private sampling - Objective sampling | Magnetic stirrer method for pooled sample digestion | animal | 32 | 0 | Trichinella | 0 |
| CONTINENTE | Pigs - breeding animals - not raised under controlled housing conditions - sows and boars - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 2037 | 0 | Trichinella | 0 |
| | Pigs - breeding animals - raised under controlled housing conditions - sows and boars - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 18208 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 46690 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 3236058 | 0 | Trichinella | 0 |
| | Solipeds, domestic - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 1001 | 0 | Trichinella | 0 |
| | Wild boars - wild - Game handling establishment - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 189 | 0 | Trichinella | 0 |
| | Wild boars - wild - Hunting - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 51 | 0 | Trichinella | 0 |
| | Wild boars - wild - Hunting - Portugal - animal sample - organ/tissue - Surveillance - Private sampling - Objective sampling | Magnetic stirrer method for pooled sample digestion | animal | 32 | 0 | Trichinella | 0 |

| Area of Sampling | Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy | Method | Sampling unit | Total units tested | Total units positive | Zoonoses | N of units positive |
|---|---|---|---|---|---|---|---|
| REGIÃO AUTÓNOMA DOS AÇORES (NUTS level 1) | Pigs - breeding animals - not raised under controlled housing conditions - sows and boars - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 138 | 0 | Trichinella | 0 |
| | Pigs - breeding animals - raised under controlled housing conditions - sows and boars - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 99 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 14807 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 51816 | 0 | Trichinella | 0 |
| REGIÃO AUTÓNOMA DA MADEIRA (NUTS level 1) | Pigs - breeding animals - raised under controlled housing conditions - sows and boars - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 10 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - not raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 1 | 0 | Trichinella | 0 |
| | Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 649 | 0 | Trichinella | 0 |
| Terras de Trás-os-Montes | Wild boars - wild - Hunting - Portugal - animal sample - organ/tissue - Surveillance - Official sampling - Census | Magnetic stirrer method for pooled sample digestion | animal | 3 | 3 | Trichinella britovi | 3 |

# FOODBORNE OUTBREAKS TABLES

## Foodborne Outbreaks: summarized data

| | | Outbreak strenght | Strong | | | Weak | | | |
|---|---|---|---|---|---|---|---|---|---|
| Causative agent | Food vehicle | N outbreaks | N human cases | N hospitalized | N deaths | N outbreaks | N human cases | N hospitalized | N deaths |
| B. cereus enterotoxins | Mixed food | 1 | 40 | 5 | 0 | | | | |
| Bacillus cereus | Mixed food | 3 | 72 | 69 | 0 | 1 | 8 | 8 | 0 |
| Clostridium botulinum toxins | Pig meat and products thereof | 1 | 4 | 4 | 0 | | | | |
| Clostridium perfringens | Mixed food | 3 | 60 | 27 | 0 | | | | |
| Norovirus | Unknown | | | | | 1 | 6 | 6 | 0 |
| Staphylococcal enterotoxins | Mixed food | 2 | 19 | 12 | 0 | | | | |
| Staphylococcus aureus | Vegetables and juices and other products thereof | | | | | 1 | 21 | 0 | 0 |
| Unspecified | Unknown | | | | | 5 | 93 | 14 | 0 |

## Strong Foodborne Outbreaks: detailed data

| Causative agent | Other Causative Agent | FBO nat. code | Outbreak type | Food vehicle | More food vehicle info | Nature of evidence | Setting | Place of origin of problem | Origin of food vehicle | Contributory factors | Comment | N outbreaks | N human cases | N hosp. | N deaths |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B. cereus enterotoxins | Not Available | PT-2017_08 | General | Mixed food | Grilled turkey steak with carrot rice | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Canteen or workplace catering | Canteen or workplace catering | Portugal | Storage time/temperature abuse | B. cereus diarrheal enterotoxin producer | 1 | 40 | 5 | 0 |
| Bacillus cereus | Clostridium perfringens | PT-2017_12 | General | Mixed food | Stewed beef meat | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Residential institution (nursing home or prison or boarding school) | Residential institution (nursing home or prison or boarding school) | Portugal | Storage time/temperature abuse | N_A | 1 | 60 | 60 | 0 |
| | Not Available | PT-2017_11 | General | Mixed food | Codfish, potatoes, pepper, parsley | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Portugal | Storage time/temperature abuse | N_A | 1 | 6 | 6 | 0 |
| | | PT-2017_14 | General | Mixed food | Mixed foods various including fish and peas rice | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Residential institution (nursing home or prison or boarding school) | Residential institution (nursing home or prison or boarding school) | Portugal | Storage time/temperature abuse | N_A | 1 | 6 | 3 | 0 |
| Clostridium botulinum toxins | Not Available | PT-2017_05 | General | Pig meat and products thereof | Smoked cured raw ham | Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans | Household | Household | Portugal | Unknown | Botulinum toxin B | 1 | 4 | 4 | 0 |

| Causative agent | Other Causative Agent | FBO nat. code | Outbreak type | Food vehicle | More food vehicle info | Nature of evidence | Setting | Place of origin of problem | Origin of food vehicle | Contributory factors | Comment | N outbreaks | N human cases | N hosp. | N deaths |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clostridium perfringens | Not Available | PT-2017_01 | General | Mixed food | Stewed meat with white rice | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | School or kindergarten | School or kindergarten | Portugal | Storage time/temperature abuse | N_A | 1 | 30 | 0 | 0 |
| | | PT-2017_03 | General | Mixed food | Vegetable cream - soup | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Residential institution (nursing home or prison or boarding school) | Residential institution (nursing home or prison or boarding school) | Portugal | Storage time/temperature abuse | N_A | 1 | 25 | 25 | 0 |
| | | PT-2017_10 | General | Mixed food | Poultry rice | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Multiple places of exposure in one country | Residential institution (nursing home or prison or boarding school) | Portugal | Storage time/temperature abuse | N_A | 1 | 5 | 2 | 0 |
| Staphylococcal enterotoxins | Bacillus | PT-2017_07 | General | Mixed food | Mixed foods various including rice, mashed potatoes, fish and poultry | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Portugal | Storage time/temperature abuse;Cross-contamination | Staphylococcus enterotoxin producer. "Other agent" - Bacillus subtilis Group (including B. subtilis, B. licheniformis, B. pumilus e B. amyloliquefaciens) | 1 | 7 | 7 | 0 |
| | Not Available | PT-2017_02 | General | Mixed food | Sliced cheese and dry porc sausage, used to coat duck rice | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Multiple places of exposure in one country | Canteen or workplace catering | Portugal | Storage time/temperature abuse;Cross-contamination | Staphylococcus enterotoxin A and D producer | 1 | 12 | 5 | 0 |

## Weak Foodborne Outbreaks: detailed data

| Causative agent | Other Causative Agent | FBO nat. code | Outbreak type | Food vehicle | More food vehicle info | Nature of evidence | Setting | Place of origin of problem | Origin of food vehicle | Contributory factors | Comment | N outbreaks | N human cases | N hosp. | N deaths |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bacillus cereus | Not Available | PT-2017_13 | General | Mixed food | Mixed foods various including beans, meat, rice, tuna and potatoes | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | Residential institution (nursing home or prison or boarding school) | Residential institution (nursing home or prison or boarding school) | Portugal | Storage time/temperature abuse | N_A | 1 | 8 | 8 | 0 |
| Norovirus | Not Available | PT-2017_06 | General | Unknown | N_A | Unknown | School or kindergarten | School or kindergarten | Unknown | Unknown | Norovirus GII | 1 | 6 | 6 | 0 |
| Staphylococcus aureus | Not Available | PT-2017_09 | General | Vegetables and juices and other products thereof | Corn and letuce salad | Detection of causative agent in food vehicle or its component - Symptoms and onset of illness pathognomonic to causative agent | School or kindergarten | School or kindergarten | Portugal | Storage time/temperature abuse;Cross-contamination | N_A | 1 | 21 | 0 | 0 |
| Unspecified | Not Available | PT-2017_04 | General | Unknown | N_A | Unknown | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Unknown | Unknown | N_A | 1 | 27 | 2 | 0 |
| | | PT-2017_15 | General | Unknown | N_A | Unknown | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Restaurant or Cafe or Pub or Bar or Hotel or Catering service | Unknown | Unknown | N_A | 1 | 3 | 3 | 0 |
| | | PT-2017_16 | General | Unknown | N_A | Unknown | Multiple places of exposure in one country | School or kindergarten | Unknown | Unknown | N_A | 1 | 21 | 0 | 0 |

| Causative agent | Other Causative Agent | FBO nat. code | Outbreak type | Food vehicle | More food vehicle info | Nature of evidence | Setting | Place of origin of problem | Origin of food vehicle | Contributory factors | Comment | N outbreaks | N human cases | N hosp. | N deaths |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unspecified | Not Available | PT-2017_17 | General | Unknown | N_A | Unknown | Residential institution (nursing home or prison or boarding school) | Residential institution (nursing home or prison or boarding school) | Unknown | Unknown | N_A | 1 | 29 | 5 | 0 |
| | | PT-2017_18 | General | Unknown | N_A | Unknown | Residential institution (nursing home or prison or boarding school) | Residential institution (nursing home or prison or boarding school) | Unknown | Unknown | N_A | 1 | 13 | 4 | 0 |

## ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

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

Sampling Stage: Processing plant | Sampling Type: food sample - meat | Sampling Context: Monitoring

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

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ciprofloxacin | Erythromycin | Gentamicin | Nalidixic acid | Streptomycin | Tetracycline |
|---|---|---|---|---|---|---|---|
| | **ECOFF** | **0.5** | **8** | **2** | **16** | **4** | **2** |
| | **Lowest limit** | **0.12** | **1** | **0.12** | **1** | **0.25** | **0.5** |
| | **Highest limit** | **16** | **128** | **16** | **64** | **16** | **64** |
| | **N of tested isolates** | **8** | **8** | **8** | **8** | **8** | **8** |
| **MIC** | **N of resistant isolates** | **8** | **3** | **0** | **7** | **0** | **8** |
| <=0.12 | | | | 1 | | | |
| 0.25 | | | | 5 | | | |
| 0.5 | | | | 1 | | | |
| <=1 | | | 5 | | | | |
| 1 | | | | | | 6 | |
| 2 | | 2 | | 1 | | 2 | |
| 4 | | 2 | | | | | |
| 8 | | 2 | | | | | |
| 16 | | 2 | | | 1 | | 1 |
| 32 | | | | | 4 | | 3 |
| 64 | | | | | 1 | | 2 |
| >64 | | | | | 2 | | 2 |
| >128 | | | 3 | | | | |

## Table Antimicrobial susceptibility testing of Campylobacter coli in Meat from pig - carcase

Sampling Stage: Processing plant | Sampling Type: food sample - carcase swabs | Sampling Context: Monitoring

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

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ciprofloxacin | Erythromycin | Gentamicin | Nalidixic acid | Streptomycin | Tetracycline |
|---|---|---|---|---|---|---|---|
| | **ECOFF** | **0.5** | **8** | **2** | **16** | **4** | **2** |
| | **Lowest limit** | **0.12** | **1** | **0.12** | **1** | **0.25** | **0.5** |
| | **Highest limit** | **16** | **128** | **16** | **64** | **16** | **64** |
| | **N of tested isolates** | **1** | **1** | **1** | **1** | **1** | **1** |
| **MIC** | **N of resistant isolates** | **0** | **0** | **0** | **0** | **1** | **1** |
| <=0.12 | | 1 | | | | | |
| 0.25 | | | | 1 | | | |
| <=1 | | | 1 | | | | |
| 2 | | | | | 1 | | |
| >16 | | | | | | 1 | |
| 32 | | | | | | | 1 |

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

Sampling Stage: Processing plant | Sampling Type: food sample - meat | Sampling Context: Monitoring

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

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ciprofloxacin | Erythromycin | Gentamicin | Nalidixic acid | Streptomycin | Tetracycline |
|---|---|---|---|---|---|---|---|
| | **ECOFF** | **0.5** | **8** | **2** | **16** | **4** | **2** |
| | **Lowest limit** | **0.12** | **1** | **0.12** | **1** | **0.25** | **0.5** |
| | **Highest limit** | **16** | **128** | **16** | **64** | **16** | **64** |
| | **N of tested isolates** | **1** | **1** | **1** | **1** | **1** | **1** |
| **MIC** | **N of resistant isolates** | **1** | **1** | **0** | **1** | **0** | **1** |
| 0.25 | | | | 1 | | | |
| 1 | | | | | | 1 | |
| 4 | | 1 | | | | | |
| 32 | | | | | | | 1 |
| 64 | | | | | 1 | | |
| >128 | | | 1 | | | | |

## Table Antimicrobial susceptibility testing of Campylobacter coli in Meat from pig - meat products

Sampling Stage: Processing plant | Sampling Type: food sample - meat | Sampling Context: Monitoring

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

Analytical Method:

Country of Origin: Portugal

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

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

Sampling Stage: Processing plant | Sampling Type: food sample - meat | Sampling Context: Monitoring

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

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ciprofloxacin | Erythromycin | Gentamicin | Nalidixic acid | Streptomycin | Tetracycline |
|---|---|---|---|---|---|---|---|
| | **ECOFF** | **0.5** | **8** | **2** | **16** | **4** | **2** |
| | **Lowest limit** | **0.12** | **1** | **0.12** | **1** | **0.25** | **0.5** |
| | **Highest limit** | **16** | **128** | **16** | **64** | **16** | **64** |
| | **N of tested isolates** | **3** | **3** | **3** | **3** | **3** | **3** |
| **MIC** | **N of resistant isolates** | **2** | **2** | **2** | **2** | **3** | **3** |
| <=0.12 | | 1 | | | | | |
| 1 | | | | 1 | | | |
| 2 | | | 1 | | | | |
| 4 | | 1 | | | | | |
| 8 | | | | | 1 | | |
| 16 | | 1 | | | | | |
| >16 | | | | 2 | | 3 | |
| 64 | | | | | 1 | | 1 |
| >64 | | | | | 1 | | 2 |
| 128 | | | 1 | | | | |
| >128 | | | 1 | | | | |

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

Sampling Stage: Processing plant | Sampling Type: food sample - meat | Sampling Context: Monitoring

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

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ciprofloxacin | Erythromycin | Gentamicin | Nalidixic acid | Streptomycin | Tetracycline |
|---|---|---|---|---|---|---|---|
| | **ECOFF** | **0.5** | **4** | **2** | **16** | **4** | **1** |
| | **Lowest limit** | **0.12** | **1** | **0.12** | **1** | **0.25** | **0.5** |
| | **Highest limit** | **16** | **128** | **16** | **64** | **16** | **64** |
| | **N of tested isolates** | **4** | **4** | **4** | **4** | **4** | **4** |
| **MIC** | **N of resistant isolates** | **4** | **1** | **0** | **4** | **0** | **3** |
| <=0.12 | | | | 2 | | | |
| <=0.25 | | | | | | 2 | |
| 0.25 | | | | 2 | | | |
| <=1 | | | 3 | | | | |
| 1 | | | | | | 2 | 1 |
| 4 | | 2 | | | | | |
| 8 | | 1 | | | | | |
| 16 | | 1 | | | | | 1 |
| 32 | | | 1 | | 2 | | 1 |
| >64 | | | | | 2 | | 1 |

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

Sampling Stage: Processing plant | Sampling Type: food sample - neck skin | Sampling Context: Monitoring

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

Analytical Method:

Country of Origin: Portugal

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

## ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

### Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Meat from bovine animals and pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **1** | **1** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | | | | | | 1 | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 64 | | | | | | 1 | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **3** | **0** | **0** |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.064 | | | | | | | 3 | | | | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | | 2 |
| <=0.5 | | | | | 3 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 3 | 1 |
| <=1 | | | | | | | | 3 | | | | | | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 3 | | | | | | | | 3 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| >64 | | 2 | | | | | | | | | | | 3 | | |
| >1024 | | | | | | | | | | | | 2 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Birds

Sampling Stage: Natural habitat

Sampling Type: animal sample - cloacal swab

Sampling Context: Monitoring

Sampler: Not applicable

Sampling Strategy: Other

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | | | | 2 | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 2 | |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 2 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | | | | | | | | | 1 | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Meat from poultry, unspecified - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **0** | **1** | **2** | **2** | **0** | **0** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 1 | 1 |
| <=1 | | | | | | | | 2 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | 1 | | | | |
| >64 | | 2 | | | | | | | | | | | 2 | | |
| >1024 | | | | | | | | | | | | 2 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Meat from turkey - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | 1 | | | | |
| >64 | | 1 | | | | | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | 2 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 2 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | 1 | | | | |
| >64 | | 2 | | | | | | | | | | | 2 | | |
| >1024 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **0** | **0** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 2 | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | 2 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 2 | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| >64 | | 2 | | | | | | | | | | | 2 | | |
| >1024 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,[5],12:i:- in Meat from pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **1** | **2** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | | 2 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | |
| <=1 | | 1 | | | | | | 2 | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| >64 | | 1 | | | | | | | | | | | 2 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| >64 | | | | | | | | | | | | | 1 | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,12:i:- in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **2** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **0** | **2** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | | |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | |
| <=1 | | | | | | | | 2 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 2 |
| >64 | | 2 | | | | | | | | | | | 2 | | |
| 128 | | | | | | 1 | | | | | | | | | |
| >128 | | | | | | 1 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 2 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,12:i:- in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,12:i:- in Meat from bovine animals - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,12:i:- in Meat from pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella 4,12:i:- in Meat from pig - fresh

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| 0.064 | | | | | | | 1 | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 16 | | | | | | 1 | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| >64 | | 1 | | | | | | | | | | | | | |

## Table Antimicrobial susceptibility testing of Salmonella Albany in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 2 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **1** |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| 0.064 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | 1 | 2 |
| <=0.5 | | | | | 3 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | |
| <=1 | | 1 | | | | | | 3 | | | | | | | |
| <=2 | | | | | | | | | | | | | 3 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 3 | | | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 2 | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | 1 | | | | | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **3** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **0** | **0** | **1** | **0** | **0** | **1** |
| <=0.03 | | | | | | | | | | 6 | | | | | |
| 0.03 | | | | | | | 6 | | | | | | | | |
| <=0.25 | | | | 6 | | | | | | | | | | 3 | 5 |
| <=0.5 | | | | | 6 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 3 | |
| <=1 | | 3 | | | | | | 6 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 6 | | |
| <=4 | | | | | | | | | | | 6 | | | | |
| <=8 | | | | | | 6 | | | | | | | | | |
| 8 | | | 6 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 5 | | | |
| >32 | | | | | | | | | 2 | | | | | | 1 |
| >64 | | 3 | | | | | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Anatum in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Anatum in Meat from duck - fresh

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **1** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | 1 | | | | | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method:

Country of Origin: Portugal

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **1** | **1** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| >4 | | | | 1 | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| >8 | | | | | 1 | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| 128 | | | | | | 1 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Bredeney in Birds

Sampling Stage: Natural habitat

Sampling Type: animal sample - cloacal swab

Sampling Context: Monitoring

Sampler: Not applicable

Sampling Strategy: Other

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **1** | **0** | **0** | **1** | **1** | **0** | **1** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | | | | | | 1 | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | 1 | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | | | | | | | | | | | | 1 | | |
| 128 | | | | | | 1 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Bredeney in Meat from turkey - meat preparation - intended to be eaten cooked

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Bredeney in Meat from turkey

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **1** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | | | 1 | | | | | | | | 1 |
| 2 | | | | | | | | | | | | | | 1 | |
| 16 | | | | | | 1 | | | | | | 1 | | | |
| 32 | | | 1 | | | | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >128 | | | | | | | | | | | 1 | | | | |

## Table Antimicrobial susceptibility testing of Salmonella Bredeney in Meat from pig - meat products - fresh raw sausages

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **2** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **1** |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | 2 | 2 |
| <=0.5 | | | | | 3 | | | | 3 | | | | | | |
| 0.5 | | | | | | | 2 | | | | | | | 1 | |
| <=1 | | 2 | | | | | | 3 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 3 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | 2 | 2 | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | 1 | | | | | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **1** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | 1 | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | 1 | | | | | | | | | | | | | |

## Table Antimicrobial susceptibility testing of Salmonella Coeln in Meat from turkey

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **0** |
| <=0.015 | | | | | | | 15 | | | | | | | | |
| <=0.03 | | | | | | | | | | 18 | | | | | |
| 0.03 | | | | | | | 3 | | | | | | | | |
| <=0.25 | | | | 18 | | | | | | | | | | 15 | 16 |
| <=0.5 | | | | | 18 | | | | 17 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 3 | 2 |
| <=1 | | 17 | | | | | | 17 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 17 | | |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 17 | | | | |
| <=8 | | | | | | 18 | | | | | | | | | |
| 8 | | | 18 | | | | | | | | 1 | | | | |
| 16 | | | | | | | | | | | | 8 | | | |
| 32 | | | | | | | | | | | | 8 | | | |
| 64 | | | | | | | | | | | | 1 | | | |
| >64 | | | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| 0.25 | | | | | | | 1 | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | 1 | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from poultry, unspecified - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from pig - meat products - fresh raw sausages

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | | | | | | | | | 1 | | | | |
| 16 | | | 1 | | | | | | | | | 1 | | | |
| >64 | | | | | | | | | | | | | 1 | | |

## Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from bovine animals - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 64 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| 64 | | | | | | | | | | | | | 1 | | |

## Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from pig - fresh

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 2 | |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 2 |
| <=1 | | 2 | | | | | | 2 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Derby in Meat from pig - fresh

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | | | | | | 1 | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >64 | | | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Dublin in Meat from bovine animals - minced meat - intended to be eaten cooked

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | 1 | | | |
| 8 | | | 1 | | | | | | | | | | | | |

## Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies enterica in Ducks

Sampling Stage: Farm

Sampling Type: animal sample - organ/tissue

Sampling Context: Clinical investigations

Sampler: Industry sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | 1 | | | |
| 8 | | | 1 | | | | | | | | | | | | |

## Table Antimicrobial susceptibility testing of Salmonella enterica, subspecies salamae in Gallus gallus (fowl) - broilers - before slaughter

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 5 | | | | | |
| 0.03 | | | | | | | 7 | | | | | | | | |
| 0.064 | | | | | | | | | | 2 | | | | | |
| <=0.25 | | | | 7 | | | | | | | | | | 6 | 2 |
| <=0.5 | | | | | 7 | | | | 7 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 5 |
| <=1 | | 2 | | | | | | 7 | | | | | | | |
| <=2 | | | | | | | | | | | | | 6 | | |
| 2 | | 5 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 6 | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 7 | | | | | | 2 | | | |
| 8 | | | 4 | | | | | | | | 1 | | | | |
| 16 | | | 3 | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 4 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **2** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.03 | | | | | | | 3 | | | | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | | |
| <=0.5 | | | | | 3 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 3 | 2 |
| 1 | | | | | | | | | | | | | | | 1 |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | 3 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 3 | | | | |
| 4 | | | | | | | | 2 | | | | | 1 | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 2 | | | |
| 64 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Meat from turkey - meat preparation - intended to be eaten cooked

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | 1 | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 4 | | | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 2 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 2 |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | 2 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| 4 | | | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **1** | **0** | **0** | **1** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | 2 | 1 |
| 0.25 | | | | | | | 1 | | | | | | | | |
| <=0.5 | | | | | 3 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 2 |
| <=1 | | 1 | | | | | | 2 | | | | | | | |
| <=2 | | | | | | | | | | | | | 3 | | |
| 2 | | 2 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| 4 | | | 1 | | | | | 1 | | | | | | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 2 | | | |
| >128 | | | | | | | | | | | 1 | | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 1 | | | | | | | | | | | | | | | 1 |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Meat from pig - fresh

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Hadar in Meat, mixed meat - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| 64 | | | | | | | | | | | | | 1 | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **6** | **0** | **0** | **0** | **3** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 7 | | | | | |
| 0.064 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 7 | | | | | | | | | | | 4 |
| <=0.5 | | | | | 7 | | | | 6 | | | | | | |
| 0.5 | | | | | | | 4 | | | | | | | 6 | 3 |
| <=1 | | 4 | | | | | | 7 | | | | | | | |
| 1 | | | | | | | 2 | | 1 | | | | | 1 | |
| <=2 | | | | | | | | | | | | | 6 | | |
| 2 | | 3 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 6 | | | | | | | | | |
| 8 | | | 6 | | | | | | | | | | | | |
| 16 | | | 1 | | | 1 | | | | | 3 | 6 | | | |
| 32 | | | | | | | | | | | 3 | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **3** | **0** | **0** | **0** | **2** | **1** | **0** | **0** | **1** |
| <=0.03 | | | | | | | | | | 9 | | | | | |
| 0.03 | | | | | | | 4 | | | | | | | | |
| 0.064 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 9 | | | | | | | | | | 5 | 5 |
| <=0.5 | | | | | 8 | | | | 9 | | | | | | |
| 0.5 | | | | | | | 3 | | | | | | | 2 | 3 |
| <=1 | | 5 | | | | | | 9 | | | | | | | |
| 1 | | | | | 1 | | | | | | | | | 2 | |
| <=2 | | | | | | | | | | | | | 7 | | |
| 2 | | 3 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 3 | | | | |
| 4 | | | | | | | | | | | | | 2 | | |
| <=8 | | | | | | 5 | | | | | | | | | |
| 8 | | | 7 | | | | | | | | 2 | | | | |
| 16 | | | 2 | | | 3 | | | | | 2 | 5 | | | |
| 32 | | | | | | 1 | | | | | 2 | 2 | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| 64 | | | | | | | | | | | | 1 | | | |
| >64 | | 1 | | | | | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella IIIa in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** |
| 0.03 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | 1 | | | |
| >64 | | 1 | | | | | | | | | | | | | |

## Table Antimicrobial susceptibility testing of Salmonella IIIb 61:-:1,5,7 in Cheeses, made from mixed milk from cows, sheep and/or goats - fresh

Sampling Stage: Unspecified

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella IIIb, group O:47 in Snakes - zoo animal

Sampling Stage: Zoo

Sampling Type: animal sample - organ/tissue

Sampling Context: Clinical investigations

Sampler: Not applicable

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella IIIb, group O:47 in Reptiles - zoo animal

Sampling Stage: Zoo

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Not specified

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella IIIb, group O:58 in Snakes - zoo animal

Sampling Stage: Zoo

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Portugal

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

## Table Antimicrobial susceptibility testing of Salmonella IIIb, group O:58 in Snakes - zoo animal

Sampling Stage: Zoo

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **1** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | | | | | | | | | | | | 1 |
| <=0.5 | | | | | | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | | 1 | | | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >8 | | | | | 1 | | | | | | | | | | |
| 32 | | | | | | 1 | | | | | | | | | |
| 64 | | | | | | | | | | | | | 1 | | |
| >64 | | 1 | | | | | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Indiana in Meat from duck - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | | | | | | 1 | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **1** | **1** | **1** | **0** | **1** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.5 | | | | | | | | | 1 | | | | | | |
| 0.5 | | | | 1 | | | | | | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | 1 | | 1 | | | | | | | 1 | |
| 4 | | 1 | | | | | | | | | | | | | |
| 16 | | | | | | 1 | | | | | | | | | |
| 32 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | | | | | | | | | | | | 1 | | |
| >128 | | | | | | | | | | | 1 | | | | |
| 1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Infantis in Meat from broilers (Gallus gallus) - minced meat - intended to be eaten cooked

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **1** | **1** | **1** | **0** | **1** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | | | 1 | | | | | | | 1 | |
| 4 | 1 | | | | | | | | | | | | | | |
| 16 | | | | | | 1 | | | | | | | | | |
| 32 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | | | | | | | | | | | | 1 | | |
| >128 | | | | | | | | | | | 1 | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 10 | | | | | |
| 0.03 | | | | | | | 10 | | | | | | | | |
| <=0.25 | | | | 10 | | | | | | | | | | 7 | |
| <=0.5 | | | | | 9 | | | | 10 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 3 | 9 |
| <=1 | | 6 | | | | | | 10 | | | | | | | |
| 1 | | | | | 1 | | | | | | | | | | 1 |
| <=2 | | | | | | | | | | | | | 10 | | |
| 2 | | 4 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 10 | | | | |
| <=8 | | | | | | 9 | | | | | | | | | |
| 8 | | | 8 | | | | | | | | | | | | |
| 16 | | | 2 | | | 1 | | | | | | 3 | | | |
| 32 | | | | | | | | | | | | 5 | | | |
| 64 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 4 | | | | | |
| 0.03 | | | | | | | 4 | | | | | | | | |
| <=0.25 | | | | 4 | | | | | | | | | | 3 | 1 |
| <=0.5 | | | | | 3 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 3 |
| <=1 | | 4 | | | | | | 4 | | | | | | | |
| 1 | | | | | 1 | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 4 | | |
| 2 | | | | | | | | | 1 | | | | | | |
| <=4 | | | | | | | | | | | 4 | | | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 4 | | | | | | | | | | | | |
| 16 | | | | | | 1 | | | | | | | | | |
| 32 | | | | | | | | | | | | 4 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Kedougou in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Kentucky in Meat from broilers (Gallus gallus) - offal

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **1** | **1** | **1** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | 1 | | | | | | | | | 1 | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >8 | | | | | | | 1 | | | | | | | | |
| 32 | | | | | | | | | 1 | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >128 | | | | | | | | | | | 1 | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Kentucky in Meat from turkey - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **1** | **1** | **1** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | 1 | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >8 | | | | | | | 1 | | | | | | | | |
| 16 | | | | | | | | | 1 | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >128 | | | | | | | | | | | 1 | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Kimuenza in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Kirkee in Gallus gallus (fowl) - breeding flocks for broiler production line

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | | | | | | | 1 | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | 1 | | | | | | | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 2 | 2 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| <=1 | | 2 | | | | | | 2 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| 4 | | | 2 | | | | | | | | | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 16 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| >32 | | | | | | | | | 1 | | | | | | |
| >64 | | 1 | | | | | | | | | | | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| 0.064 | | | | | | | 1 | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | 1 | | | | | | | | | |
| 64 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Madelia in Meat from sheep

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Mbandaka in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| <=0.015 | | | | | | | 4 | | | | | | | | |
| <=0.03 | | | | | | | | | | 4 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 5 | | | | | | | | | | 4 | 3 |
| <=0.5 | | | | | 5 | | | | 5 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 2 |
| <=1 | | 5 | | | | | | 5 | | | | | | | |
| <=2 | | | | | | | | | | | | | 5 | | |
| <=4 | | | | | | | | | | | 5 | | | | |
| <=8 | | | | | | 5 | | | | | | | | | |
| 8 | | | 3 | | | | | | | | | | | | |
| 16 | | | 2 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 5 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 2 | | | | | | | | |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 3 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | 2 |
| <=1 | | 3 | | | | | | 3 | | | | | | | |
| <=2 | | | | | | | | | | | | | 3 | | |
| <=4 | | | | | | | | | | | 3 | | | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 3 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 2 | | | |
| 64 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Mikawasima in Gallus gallus (fowl) - laying hens - day-old chicks

Sampling Stage: Hatchery

Sampling Type: environmental sample - delivery box liner

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Molade in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 64 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Montevideo in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | | 2 |
| <=0.5 | | | | | 2 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | |
| <=1 | | 2 | | | | | | 2 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Muenchen in Meat from pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 2 |
| <=1 | | 1 | | | | | | 2 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Newport in Turkeys

Sampling Stage: Farm

Sampling Type: animal sample - organ/tissue

Sampling Context: Clinical investigations

Sampler: Industry sampling

Sampling Strategy: Suspect sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Newport in Meat from turkey - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **1** | **0** | **0** |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 1 | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| 2 | | | | | | | | | 1 | | | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 32 | | | | | | | | | | | 1 | 1 | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **3** | **0** | **0** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | 3 | 1 |
| <=0.5 | | | | | 3 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 2 |
| <=1 | | 3 | | | | | | 3 | | | | | | | |
| <=4 | | | | | | | | | | | 3 | | | | |
| 4 | | | 2 | | | | | | | | | | | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 3 | | | |
| 64 | | | | | | | | | | | | | 3 | | |

## Table Antimicrobial susceptibility testing of Salmonella Rissen in Meat from bovine animals and pig - minced meat

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **1** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >128 | | | | | | 1 | | | | | | | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **4** | **4** | **0** | **0** | **2** | **0** | **0** | **0** | **0** | **0** | **4** | **4** | **0** | **4** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 4 | | | | | |
| 0.03 | | | | | | | 3 | | | | | | | | |
| <=0.25 | | | | 4 | | | | | | | | | | | |
| <=0.5 | | | | | 4 | | | | 3 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 4 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | 3 | |
| <=4 | | | | | | | | | | | 4 | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 32 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 4 |
| 64 | | | 2 | | | | | | | | | | | | |
| >64 | | 4 | 1 | | | | | | | | | | 4 | | |
| >128 | | | | | | 2 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 4 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Rissen in Meat from bovine animals - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **2** | **1** | **0** | **2** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| <=1 | | | | | | | | 2 | | | | | | | |
| 1 | | | | | | | | | | | | | | 1 | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 2 |
| 64 | | | | | | 1 | | | | | | | | | |
| >64 | | 2 | 1 | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 2 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Rissen in Meat from pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **0** |
| 0.064 | | | | | | | 1 | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 64 | | | 1 | | | | | | | | | | | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >128 | | | | | | 1 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 4 | | | 1 | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Senftenberg in Turkeys - unspecified - day-old chicks

Sampling Stage: Farm

Sampling Type: environmental sample - hatcher basket liner

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| 0.25 | | | | | | | 1 | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| >128 | | | | | | | | | | | 1 | | | | |

## Table Antimicrobial susceptibility testing of Salmonella Szentes in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Tennessee in Meat from turkey - meat preparation - intended to be eaten cooked

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Tennessee in Feed material of cereal grain origin

Sampling Stage: Feed mill

Sampling Type: feed sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Tennessee in Meat from pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **0** | **0** | **1** | **1** | **2** | **0** | **0** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | 1 | | | 1 | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | | 2 |
| <=0.5 | | | | | 3 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 3 | 1 |
| <=1 | | | | | | | | 3 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| 2 | | 1 | | | | | | | | | | | | | |
| 4 | | | 1 | | | | | | | | | | 1 | | |
| <=8 | | | | | | 3 | | | | | | 1 | | | |
| 8 | | | 1 | | | | 1 | | | | 2 | | | | |
| 16 | | | 1 | | | | | | | | | 1 | | | |
| >64 | | 2 | | | | | | | | | | | 2 | | |
| >128 | | | | | | | | | | | 1 | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from duck - carcase - frozen

Sampling Stage: Processing plant

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| 0.064 | | | | | | | 1 | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 16 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from bovine animals and pig - minced meat

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method:

Country of Origin: Portugal

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

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from bovine animals and pig - minced meat

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** | **0** | **2** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **0** | **0** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | 1 |
| <=1 | | | | | | | | 2 | | | | | | | |
| 1 | | | | 1 | 1 | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 8 | | | 2 | | | | | | | | 1 | | | | |
| >64 | | 2 | | | | | | | | | | | 2 | | |
| >128 | | | | | | 2 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **2** | **1** | **0** | **1** | **0** | **0** | **2** | **2** | **1** | **1** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| 0.12 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | | |
| <=0.5 | | | | | 2 | | | | | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | | | | | | | 2 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| 2 | | | | | | | | | | | | | | 1 | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 16 | | | 1 | | | | | | | | 1 | | | | |
| >32 | | | | | | | | | 1 | | | | | | 1 |
| >64 | | 2 | | | | | | | | | | | 2 | | |
| 128 | | | | | | 1 | | | | | | | | | |
| >128 | | | | | | 1 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 2 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Birds - wild

Sampling Stage: Zoo

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Industry sampling

Sampling Strategy: Not specified

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| >128 | | | | | | | | | | | 1 | | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Birds

Sampling Stage: Natural habitat

Sampling Type: animal sample - cloacal swab

Sampling Context: Monitoring

Sampler: Not applicable

Sampling Strategy: Other

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 1 | | | | | | | | | | | | | | 1 | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Pigeons

Sampling Stage: Natural habitat

Sampling Type: animal sample - organ/tissue

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | 1 | | | 2 | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | 2 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 2 | | | | | | 2 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| <=8 | | | | | | 2 | | | | | | 2 | | | |
| 8 | | | 2 | | | | | | | | | | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** |
| <=0.015 | | | | | | | 1 | | | | | | | | |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | 1 | | | | | | |
| >1024 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Partridges

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| >128 | | | | | | | | | | | 1 | | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| 0.064 | | | | | | | 2 | | | 3 | | | | | |
| <=0.25 | | | | 4 | | | | | | | | | | 2 | 4 |
| <=0.5 | | | | | 4 | | | | 4 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 3 | | |
| 2 | | 3 | | | | | | 3 | | | | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 4 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | 4 | | | | |
| 16 | | | 2 | | | | | | | | | 3 | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.064 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | 1 |
| 2 | | 2 | | | | | | 2 | | | | | | | |
| 4 | | | | | | | | | | | | | 2 | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | 2 | | | | |
| 32 | | | | | | | | | | | | 2 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from other poultry species

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **2** | **0** | **0** | **0** | **2** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 2 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 3 | | | | | | | | | | 2 | 2 |
| <=0.5 | | | | | 3 | | | | 2 | | | | | | |
| 0.5 | | | | | | | 2 | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 2 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | 2 | | | | | | 1 | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| 4 | | | 1 | | | | | | | | | | 1 | | |
| <=8 | | | | | | 3 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 2 | | | |
| >128 | | | | | | | | | | | 2 | | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| 0.064 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 1 | |
| <=1 | | | | | | | | 1 | | | | | | | |
| 2 | | 1 | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| >128 | | | | | | | | | | | 1 | | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **0** | **0** | **0** | **0** | **0** | **6** | **0** | **0** | **0** | **6** | **0** | **0** | **0** | **0** |
| <=0.03 | | | | | | | | | | 3 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| 0.064 | | | | | | | | | | 4 | | | | | |
| <=0.25 | | | | 7 | | | | | | | | | | 1 | 7 |
| 0.25 | | | | | | | 1 | | | | | | | | |
| <=0.5 | | | | | 7 | | | | 6 | | | | | | |
| 0.5 | | | | | | | 5 | | | | | | | 6 | |
| <=1 | | 5 | | | | | | 7 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 7 | | |
| 2 | | 2 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 7 | | | | | | | | | |
| 8 | | | 4 | | | | | | | | | | | | |
| 16 | | | 3 | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 6 | | | |
| >128 | | | | | | | | | | | 6 | | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from duck - offal - liver

Sampling Stage: Processing plant

Sampling Type: food sample

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | | | | |
| 0.064 | | | | | | | | | | 2 | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | | 1 |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | 2 | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | 2 | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from bovine animals - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

## Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Meat from pig - meat products

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | 1 | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **2** | **0** | **1** | **0** | **0** | **0** | **2** | **2** | **0** | **1** |
| 0.03 | | | | | | | 2 | | | | | | | | |
| 0.064 | | | | | | | | | | 2 | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | | | | | | | 1 | | | | | | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| 8 | | | 2 | | | | | 1 | | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| 64 | | | | | | | | | | | | | 1 | | |
| >64 | | 1 | | | | | | | | | | | 1 | | |
| >128 | | | | | | 2 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 2 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | 1 |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Processing plant

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official and industry sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** | **1** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 1 |
| >1024 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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** |
| <=0.03 | | | | | | | | | | 1 | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | 1 | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | | 1 |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | 1 | | | | | | 1 | | | | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 1 | | | |
| >128 | | | | | | | | | | | 1 | | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 1 | | | | | | | | | | | |
| <=0.5 | | | | | 1 | | | | 1 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 1 | 1 |
| <=1 | | 1 | | | | | | 1 | | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| <=4 | | | | | | | | | | | 1 | | | | |
| <=8 | | | | | | 1 | | | | | | | | | |
| 8 | | | 1 | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | 1 | | | |

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs and dust

Sampling Context: Control and eradication programmes

Sampler: Official and industry sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **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 | | | | | |
| 0.03 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 2 | | | | | | | | | | | |
| <=0.5 | | | | | 2 | | | | 2 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 2 | 2 |
| <=1 | | 1 | | | | | | 2 | | | | | | | |
| <=2 | | | | | | | | | | | | | 2 | | |
| 2 | | 1 | | | | | | | | | | | | | |
| <=4 | | | | | | | | | | | 2 | | | | |
| <=8 | | | | | | 2 | | | | | | | | | |
| 8 | | | 2 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | 2 | | | |

## ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Portugal

| | AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | | Cefoxitin | Ceftazidim | | Ceftazidime + Clavulanic acid | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cefotaxime synergy test | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | | Not Available | | Not Available | Not Available | Not Available | Not Available |
| | Ceftazidime synergy test | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | Not Available | Not Available |
| | ECOFF | 0.125 | 0.25 | 0.25 | 0.25 | 8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.064 | 0.5 | 0.125 | 32 |
| | Lowest limit | 0.064 | 0.25 | 0.064 | 0.064 | 0.5 | 0.25 | 0.12 | 0.12 | 0.12 | 0.015 | 0.12 | 0.03 | 0.5 |
| | Highest limit | 32 | 64 | 64 | 64 | 64 | 128 | 128 | 128 | 128 | 2 | 16 | 16 | 64 |
| | N of tested isolates | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| MIC | N of resistant isolates | 25 | 26 | 3 | 3 | 4 | 25 | 3 | 3 | 3 | 1 | 0 | 0 | 0 |
| <=0.015 | | | | | | | | | | | 17 | | | |
| <=0.03 | | | | | | | | | | | | | 25 | |
| 0.03 | | | | | | | | | | | 7 | | | |
| <=0.064 | | 1 | | 16 | | | | | | | | | | |
| 0.064 | | | | | | | | | | | 1 | | 1 | |
| <=0.12 | | | | | | | | 1 | 13 | | | 6 | | |
| 0.12 | | | | 7 | | | | | | | 1 | | | |
| 0.25 | | 1 | | | | | | | 6 | 1 | | 15 | | |
| 0.5 | | 5 | | | | | 1 | | 2 | | | 5 | | |
| 1 | | | | | | | 7 | | | | | | | |
| 2 | | | | | | 1 | 3 | | | | | | | 2 |
| 4 | | 6 | 3 | | | 10 | 1 | | | | | | | 5 |
| 8 | | 4 | 2 | | 3 | 11 | 3 | | | 2 | | | | 14 |

| | AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | | Cefoxitin | Ceftazidim | Ceftazidime + Clavulanic acid | | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cefotaxime synergy test | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | | Not Available | | Not Available | Not Available | Not Available | Not Available |
| | Ceftazidime synergy test | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | Not Available | Not Available |
| | ECOFF | 0.125 | 0.25 | 0.25 | 0.25 | 8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.064 | 0.5 | 0.125 | 32 |
| | Lowest limit | 0.064 | 0.25 | 0.064 | 0.064 | 0.5 | 0.25 | 0.12 | 0.12 | 0.12 | 0.015 | 0.12 | 0.03 | 0.5 |
| | Highest limit | 32 | 64 | 64 | 64 | 64 | 128 | 128 | 128 | 128 | 2 | 16 | 16 | 64 |
| | N of tested isolates | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| MIC | N of resistant isolates | 25 | 26 | 3 | 3 | 4 | 25 | 3 | 3 | 3 | 1 | 0 | 0 | 0 |
| 16 | | 6 | 3 | | | 1 | 8 | | | 1 | | | | 5 |
| 32 | | 2 | 6 | | | | 3 | | | | | | | |
| >32 | | 1 | | | | | | | | | | | | |
| 64 | | | 5 | | | 3 | | | | | | | | |
| >64 | | | 7 | | | | | | | | | | | |

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Portugal

| | 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** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** |
| **MIC** | **N of resistant isolates** | **26** | **7** | **26** | **23** | **12** | **18** | **4** | **5** | **0** | **18** | **20** | **19** | **0** | **14** |
| <=0.015 | | | | | | | 2 | | | | | | | | |
| <=0.03 | | | | | | | | | | 26 | | | | | |
| 0.03 | | | | | | | 5 | | | | | | | | |
| 0.064 | | | | | | | 1 | | | | | | | | |
| 0.12 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | | | | | | | | | | | 21 | 7 |
| 0.25 | | | | | | | 3 | | | | | | | | |
| <=0.5 | | | | | 3 | | | | 6 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 5 | 3 |
| <=1 | | | | | | | | 21 | | | | | | | |
| 1 | | | | | 8 | | | | 13 | | | | | | 2 |
| <=2 | | | 2 | | | | | | | | | | 4 | | |
| 2 | | | | | 1 | | | 1 | 2 | | | | | | |
| <=4 | | | | | | | | | | | 7 | | | | |
| 4 | | | 8 | 3 | | | | 4 | 1 | | | | 3 | | |
| >4 | | | | 23 | | | | | | | | | | | |
| <=8 | | | | | | 13 | | | | | | 5 | | | |
| 8 | | | 8 | | 3 | | 1 | | 1 | | | | | | |
| >8 | | | | | 11 | | 12 | | | | | | | | |
| 16 | | | 1 | | | 1 | | | | | 1 | 1 | | | |
| 32 | | | 2 | | | 1 | | | 2 | | | | | | |
| >32 | | | | | | | | | 1 | | | | | | 14 |
| 64 | | | 3 | | | | | | | | 1 | | 6 | | |

| | 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** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **26** |
| **MIC** | **N of resistant isolates** | **26** | **7** | **26** | **23** | **12** | **18** | **4** | **5** | **0** | **18** | **20** | **19** | **0** | **14** |
| >64 | | 26 | 2 | | | | | | | | | | 13 | | |
| 128 | | | | | | 8 | | | | | 3 | | | | |
| >128 | | | | | | 3 | | | | | 14 | | | | |
| >1024 | | | | | | | | | | | | 20 | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method:

Country of Origin: Portugal

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

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

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | 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** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** |
| **MIC** | **N of resistant isolates** | **18** | **0** | **6** | **6** | **8** | **6** | **0** | **3** | **0** | **6** | **24** | **42** | **0** | **14** |
| <=0.015 | | | | | | | 134 | | | | | | | | |
| <=0.03 | | | | | | | | | | 180 | | | | | |
| 0.03 | | | | | | | 41 | | | | | | | | |
| 0.064 | | | | | | | | | | 1 | | | | | |
| 0.12 | | | | | | | 2 | | | | | | | | |
| <=0.25 | | | | 175 | | | | | | | | | | 161 | 84 |
| 0.25 | | | | | | | 4 | | | | | | | | |
| <=0.5 | | | | | 175 | | | | 111 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 20 | 76 |
| <=1 | | 10 | | | | | | 181 | | | | | | | |
| 1 | | | | 1 | | | | | 61 | | | | | | 7 |
| <=2 | | | 14 | | | | | | | | | | 133 | | |
| 2 | | 68 | | | | | | | 6 | | | | | | |
| <=4 | | | | | | | | | | | 171 | | | | |
| 4 | | 84 | 76 | | 5 | | | | | | | | 5 | | |
| >4 | | | | 5 | | | | | | | | | | | |
| <=8 | | | | | | 171 | | | | | | 136 | | | |
| 8 | | 1 | 83 | | 1 | | | | | | 4 | | 1 | | |
| 16 | | 1 | 8 | | | 2 | | | 2 | | | 17 | 3 | | |
| 32 | | 1 | | | | | | | | | | 4 | | | |
| >32 | | | | | | | | | 1 | | | | | | 14 |
| 64 | | | | | | | | | | | 1 | | 13 | | |
| >64 | | 16 | | | | | | | | | | | 26 | | |

| | 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** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** | **181** |
| **MIC** | **N of resistant isolates** | **18** | **0** | **6** | **6** | **8** | **6** | **0** | **3** | **0** | **6** | **24** | **42** | **0** | **14** |
| 128 | | | | | | 5 | | | | | 1 | 1 | | | |
| >128 | | | | | | 3 | | | | | 4 | | | | |
| >1024 | | | | | | | | | | | | 23 | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Portugal

| AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | | Cefoxitin | Ceftazidim | Ceftazidime + Clavulanic acid | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Cefotaxime synergy test** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | **Not Available** | | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| **Ceftazidime synergy test** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| **ECOFF** | **0.125** | **0.25** | **0.25** | **0.25** | **8** | **0.5** | **0.5** | **0.5** | **0.064** | **0.5** | **0.125** | **32** |
| **Lowest limit** | **0.064** | **0.25** | **0.064** | **0.064** | **0.5** | **0.25** | **0.12** | **0.12** | **0.015** | **0.12** | **0.03** | **0.5** |
| **Highest limit** | **32** | **64** | **64** | **64** | **64** | **128** | **128** | **128** | **2** | **16** | **16** | **64** |
| **N of tested isolates** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** |
| **MIC** / **N of resistant isolates** | **107** | **107** | **1** | **1** | **4** | **105** | **1** | **1** | **1** | **0** | **0** | **0** |
| <=0.015 | | | | | | | | | 77 | | | |
| <=0.03 | | | | | | | | | | | 105 | |
| 0.03 | | | | | | | | | 25 | | | |
| <=0.064 | | | 93 | | | | | | | | | |
| 0.064 | | | | | | | | | 4 | | 2 | |
| <=0.12 | | | | | | | 65 | | | 39 | | |
| 0.12 | | | 13 | | | | | | 1 | | | |
| 0.25 | | | | | | | 37 | | | 58 | | |
| 0.5 | 1 | | | | | 2 | 4 | | | 10 | | |
| 1 | | | | | 1 | 2 | | | | | | |
| 2 | 6 | | | | 17 | 10 | | | | | | 7 |
| 4 | 17 | | | 1 | 61 | 46 | | | | | | 34 |
| 8 | 27 | 1 | | | 24 | 35 | | 1 | | | | 57 |
| 16 | 21 | 5 | | | 3 | 11 | | | | | | 8 |
| 32 | 26 | 30 | | | | 1 | | | | | | 1 |
| >32 | 9 | | | | | | | | | | | |

| | AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | | Cefoxitin | Ceftazidim | Ceftazidime + Clavulanic acid | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Cefotaxime synergy test** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | **Not Available** | | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| | **Ceftazidime synergy test** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| | **ECOFF** | **0.125** | **0.25** | **0.25** | **0.25** | **8** | **0.5** | **0.5** | **0.5** | **0.064** | **0.5** | **0.125** | **32** |
| | **Lowest limit** | **0.064** | **0.25** | **0.064** | **0.064** | **0.5** | **0.25** | **0.12** | **0.12** | **0.015** | **0.12** | **0.03** | **0.5** |
| | **Highest limit** | **32** | **64** | **64** | **64** | **64** | **128** | **128** | **128** | **2** | **16** | **16** | **64** |
| | **N of tested isolates** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** |
| **MIC** | **N of resistant isolates** | **107** | **107** | **1** | **1** | **4** | **105** | **1** | **1** | **1** | **0** | **0** | **0** |
| 64 | | | 45 | | | 1 | | | | | | | |
| >64 | | | 26 | | | | | | | | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Portugal

| | 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** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** |
| **MIC** | **N of resistant isolates** | **107** | **9** | **107** | **105** | **37** | **49** | **1** | **14** | **0** | **26** | **66** | **91** | **0** | **55** |
| <=0.015 | | | | | | | 42 | | | | | | | | |
| <=0.03 | | | | | | | | | | 105 | | | | | |
| 0.03 | | | | | | | 15 | | | | | | | | |
| 0.064 | | | | | | | 1 | | | 1 | | | | | |
| 0.12 | | | | | | | 1 | | | 1 | | | | | |
| <=0.25 | | | | | | | | | | | | | | 84 | 16 |
| 0.25 | | | | | | | 18 | | | | | | | | |
| <=0.5 | | | | | 2 | | | | 65 | | | | | | |
| 0.5 | | | | | | | 8 | | | | | | | 23 | 33 |
| <=1 | | | | | | | | 106 | | | | | | | |
| 1 | | | | | 4 | | 2 | | 23 | | | | | | 3 |
| <=2 | | | 1 | | | | | | | | | | 14 | | |
| 2 | | | | | 11 | | | | 5 | | | | | | |
| <=4 | | | | | | | | | | | 59 | | | | |
| 4 | | | 32 | | 46 | | | | 2 | | | | 2 | | |
| >4 | | | | 107 | | | | | | | | | | | |
| <=8 | | | | | | 69 | | | | | | 33 | | | |
| 8 | | | 58 | | 28 | | 3 | 1 | | | 16 | | | | |
| >8 | | | | | 16 | | 17 | | | | | | | | |
| 16 | | | 7 | | | 1 | | | 3 | | 6 | 7 | | | |
| 32 | | | 1 | | | | | | 4 | | | | 3 | | |
| >32 | | | | | | | | | 5 | | | | | | 55 |
| 64 | | | 5 | | | 3 | | | | | | 1 | 20 | | |

| | 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** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** | **107** |
| **MIC** | **N of resistant isolates** | **107** | **9** | **107** | **105** | **37** | **49** | **1** | **14** | **0** | **26** | **66** | **91** | **0** | **55** |
| >64 | | 107 | 3 | | | | | | | | | | 68 | | |
| 128 | | | | | | 15 | | | | | 1 | | | | |
| >128 | | | | | | 19 | | | | | 25 | | | | |
| >1024 | | | | | | | | | | | | 66 | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method:

Country of Origin: Portugal

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

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: Portugal

| | 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** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** |
| **MIC** | **N of resistant isolates** | **85** | **23** | **5** | **5** | **63** | **30** | **3** | **4** | **0** | **17** | **97** | **127** | **0** | **80** |
| <=0.015 | | | | | | | 87 | | | | | | | | |
| <=0.03 | | | | | | | | | | 141 | | | | | |
| 0.03 | | | | | | | 21 | | | | | | | | |
| 0.064 | | | | | | | 4 | | | 1 | | | | | |
| 0.12 | | | | | | | 7 | | | | | | | | |
| <=0.25 | | | | 137 | | | | | | | | | | 111 | 34 |
| 0.25 | | | | | | | 10 | | | | | | | | |
| <=0.5 | | | | | 137 | | | | 72 | | | | | | |
| 0.5 | | | | | | | 6 | | | | | | | 30 | 24 |
| <=1 | | 4 | | | | | | 136 | | | | | | | |
| 1 | | | | | | | | | 61 | | | | | 1 | 3 |
| <=2 | | | 9 | | | | | | | | | | 11 | | |
| 2 | | 20 | | | | | | 3 | 5 | | | | | | 1 |
| <=4 | | | | | | | | | | | 119 | | | | |
| 4 | | 31 | 50 | | 2 | | | 2 | | | | | 4 | | |
| >4 | | | | 5 | | | | | | | | | | | |
| <=8 | | | | | | 72 | | | | | | 40 | | | |
| 8 | | 2 | 55 | | 1 | | 2 | 1 | | | 5 | | | | |
| >8 | | | | | 2 | | 5 | | | | | | | | |
| 16 | | | 5 | | | 7 | | | 2 | | 1 | 4 | 1 | | |
| 32 | | 2 | 2 | | | 11 | | | 2 | | 1 | 1 | 1 | | |
| >32 | | | | | | | | | | | | | | | 80 |
| 64 | | | 3 | | | 21 | | | | | 2 | | 24 | | |

| | 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** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** | **142** |
| **MIC** | **N of resistant isolates** | **85** | **23** | **5** | **5** | **63** | **30** | **3** | **4** | **0** | **17** | **97** | **127** | **0** | **80** |
| >64 | | 83 | 18 | | | | | | | | | | 101 | | |
| 128 | | | | | | 15 | | | | | 2 | | | | |
| >128 | | | | | | 16 | | | | | 12 | | | | |
| 1024 | | | | | | | | | | | | 1 | | | |
| >1024 | | | | | | | | | | | | 96 | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Portugal

| | AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | Cefoxitin | Ceftazidim | Ceftazidime + Clavulanic acid | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cefotaxime synergy test | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available |
| | Ceftazidime synergy test | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | Not Available | Not Available |
| | ECOFF | 0.125 | 0.25 | 0.25 | 0.25 | 8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.064 | 0.5 | 0.125 | 32 |
| | Lowest limit | 0.064 | 0.25 | 0.064 | 0.064 | 0.5 | 0.25 | 0.12 | 0.12 | 0.12 | 0.015 | 0.12 | 0.03 | 0.5 |
| | Highest limit | 32 | 64 | 64 | 64 | 64 | 128 | 128 | 128 | 128 | 2 | 16 | 16 | 64 |
| | N of tested isolates | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 151 |
| MIC | N of resistant isolates | 148 | 151 | 22 | 22 | 32 | 145 | 22 | 22 | 22 | 10 | 0 | 0 | 0 |
| <=0.015 | | | | | | | | | | | 94 | | | |
| <=0.03 | | | | | | | | | | | | | 137 | |
| 0.03 | | | | | | | | | | | 33 | | | |
| <=0.064 | | 1 | | 101 | | | | | | | | | | |
| 0.064 | | | | | | | | | | | 14 | | 14 | |
| <=0.12 | | | | | | | | 5 | 50 | 1 | | 25 | | |
| 0.12 | | 2 | | 26 | | | | | | | 5 | | | |
| 0.25 | | 7 | | 2 | | | | | 64 | 4 | 4 | 109 | | |
| 0.5 | | 12 | | | | | 6 | | 5 | | | 17 | | |
| 1 | | 5 | | | | | 20 | | | | 1 | | | |
| 2 | | 9 | 2 | | 2 | 9 | 39 | | | 2 | | | | 5 |
| 4 | | 21 | | 1 | | 67 | 19 | | 1 | 1 | | | | 46 |
| 8 | | 41 | 5 | | 9 | 43 | 27 | | | 6 | | | | 81 |
| 16 | | 34 | 25 | | 5 | 9 | 22 | | | 10 | | | | 17 |
| 32 | | 14 | 43 | | 5 | 4 | 14 | | | | | | | 2 |
| >32 | | 5 | | | | | | | | | | | | |

| | AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | | Cefoxitin | Ceftazidim | | Ceftazidime + Clavulanic acid | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Cefotaxime synergy test** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | | **Not Available** | | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| | **Ceftazidime synergy test** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| | **ECOFF** | **0.125** | **0.25** | **0.25** | **0.25** | **8** | **0.5** | **0.5** | **0.5** | **0.5** | **0.064** | **0.5** | **0.125** | **32** |
| | **Lowest limit** | **0.064** | **0.25** | **0.064** | **0.064** | **0.5** | **0.25** | **0.12** | **0.12** | **0.12** | **0.015** | **0.12** | **0.03** | **0.5** |
| | **Highest limit** | **32** | **64** | **64** | **64** | **64** | **128** | **128** | **128** | **128** | **2** | **16** | **16** | **64** |
| | **N of tested isolates** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** |
| **MIC** | **N of resistant isolates** | **148** | **151** | **22** | **22** | **32** | **145** | **22** | **22** | **22** | **10** | **0** | **0** | **0** |
| 64 | | | 48 | | | 9 | 2 | | | 2 | | | | |
| >64 | | | 28 | | | 10 | | | | | | | | |
| 128 | | | | | | | 2 | | | | | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Portugal

| | 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** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** |
| **MIC** | **N of resistant isolates** | **151** | **44** | **151** | **144** | **70** | **90** | **15** | **11** | **0** | **68** | **119** | **131** | **1** | **106** |
| <=0.015 | | | | | | | 35 | | | | | | | | |
| <=0.03 | | | | | | | | | | 146 | | | | | |
| 0.03 | | | | | | | 24 | | | | | | | | |
| 0.064 | | | | | | | 2 | | | 5 | | | | | |
| 0.12 | | | | | | | 4 | | | | | | | | |
| <=0.25 | | | | | | | | | | | | | | 100 | 23 |
| 0.25 | | | | | | | 29 | | | | | | | | |
| <=0.5 | | | | | 7 | | | | 96 | | | | | | |
| 0.5 | | | | | | | 8 | | | | | | | 34 | 19 |
| <=1 | | | | | | | | 134 | | | | | | | |
| 1 | | | | 2 | 27 | | 4 | | 42 | | | | | 16 | 3 |
| <=2 | | | 4 | | | | | | | | | | 16 | | |
| 2 | | | | 2 | 38 | | | 2 | 2 | | | | | 1 | |
| <=4 | | | | | | | | | | | 68 | | | | |
| 4 | | | 39 | 1 | 19 | | | 15 | 2 | | | | 3 | | |
| >4 | | | | 146 | | | | | | | | | | | |
| <=8 | | | | | | 65 | | | | | | 26 | | | |
| 8 | | | 59 | | 26 | | 7 | | 1 | | 10 | | 1 | | 1 |
| >8 | | | | | 34 | | 38 | | | | | | | | |
| 16 | | 1 | 5 | | | 16 | | | 1 | | 5 | 4 | | | 1 |
| 32 | | | 2 | | | 9 | | | | | 4 | 1 | 1 | | |
| >32 | | | | | | | | | 7 | | | | | | 104 |
| 64 | | | 4 | | | 14 | | | | | 2 | 1 | 23 | | |

| | 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** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** | **151** |
| **MIC** | **N of resistant isolates** | **151** | **44** | **151** | **144** | **70** | **90** | **15** | **11** | **0** | **68** | **119** | **131** | **1** | **106** |
| >64 | | 150 | 38 | | | | | | | | | | 107 | | |
| 128 | | | | | | 18 | | | | | 8 | | | | |
| >128 | | | | | | 29 | | | | | 54 | | | | |
| >1024 | | | | | | | | | | | | 119 | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method:

Country of Origin: 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** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** |
| **MIC** | **N of resistant isolates** | **6** | **0** | **0** | **0** | **3** | **3** | **0** | **0** | **0** | **0** | **4** | **5** | **0** | **3** |
| <=0.015 | | | | | | | 2 | | | | | | | | |
| <=0.03 | | | | | | | | | | 6 | | | | | |
| 0.064 | | | | | | | 1 | | | | | | | | |
| <=0.25 | | | | 6 | | | | | | | | | | 4 | 2 |
| 0.25 | | | | | | | 2 | | | | | | | | |
| <=0.5 | | | | | 6 | | | | 3 | | | | | | |
| 0.5 | | | | | | | 1 | | | | | | | 2 | 1 |
| <=1 | | | | | | | | 6 | | | | | | | |
| 1 | | | | | | | | | 1 | | | | | | |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | | | | | | | | 2 | | | | | | |
| <=4 | | | | | | | | | | | 6 | | | | |
| 4 | | | 2 | | | | | | | | | | | | |
| <=8 | | | | | | 3 | | | | | | 1 | | | |
| 8 | | | 4 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | 1 | | | |
| 32 | | | | | | 1 | | | | | | | | | |
| >32 | | | | | | | | | | | | | | | 3 |
| 64 | | | | | | 1 | | | | | | | 1 | | |
| >64 | | 6 | | | | | | | | | | | 4 | | |
| >128 | | | | | | 1 | | | | | | | | | |
| >1024 | | | | | | | | | | | | 4 | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Spain

| AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | Cefoxitin | Ceftazidim | Ceftazidime + Clavulanic acid | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|
| **Cefotaxime synergy test** | **Not Available** | **Not Available** | **Positive/Present** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| **Ceftazidime synergy test** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Positive/Present** | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| **ECOFF** | **0.125** | **0.25** | **0.25** | **8** | **0.5** | **0.5** | **0.064** | **0.5** | **0.125** | **32** |
| **Lowest limit** | **0.064** | **0.25** | **0.064** | **0.5** | **0.25** | **0.12** | **0.015** | **0.12** | **0.03** | **0.5** |
| **Highest limit** | **32** | **64** | **64** | **64** | **128** | **128** | **2** | **16** | **16** | **64** |
| **N of tested isolates** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** |
| **MIC** **N of resistant isolates** | **11** | **11** | **0** | **5** | **11** | **0** | **0** | **0** | **0** | **0** |
| <=0.015 | | | | | | | 6 | | | |
| <=0.03 | | | | | | | | | 11 | |
| 0.03 | | | | | | | 3 | | | |
| <=0.064 | | | 6 | | | | | | | |
| 0.064 | | | | | | | 2 | | | |
| <=0.12 | | | | | | 4 | | 2 | | |
| 0.12 | | | 5 | | | | | | | |
| 0.25 | | | | | | 6 | | 8 | | |
| 0.5 | 2 | | | | | 1 | | 1 | | |
| 1 | | | | | 1 | | | | | |
| 2 | 1 | | | | 3 | | | | | |
| 4 | | 1 | | 3 | 2 | | | | | 4 |
| 8 | 4 | 1 | | 3 | 1 | | | | | 5 |
| 16 | 1 | | | 5 | 3 | | | | | 2 |
| 32 | 2 | 1 | | | 1 | | | | | |
| >32 | 1 | | | | | | | | | |

| | AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | Cefoxitin | Ceftazidim | Ceftazidime + Clavulanic acid | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cefotaxime synergy test | Not Available | Not Available | Positive/Present | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available |
| | Ceftazidime synergy test | Not Available | Not Available | Not Available | Not Available | Not Available | Positive/Present | Not Available | Not Available | Not Available | Not Available |
| | ECOFF | 0.125 | 0.25 | 0.25 | 8 | 0.5 | 0.5 | 0.064 | 0.5 | 0.125 | 32 |
| | Lowest limit | 0.064 | 0.25 | 0.064 | 0.5 | 0.25 | 0.12 | 0.015 | 0.12 | 0.03 | 0.5 |
| | Highest limit | 32 | 64 | 64 | 64 | 128 | 128 | 2 | 16 | 16 | 64 |
| | N of tested isolates | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| MIC | N of resistant isolates | 11 | 11 | 0 | 5 | 11 | 0 | 0 | 0 | 0 | 0 |
| 64 | | | 6 | | | | | | | | |
| >64 | | | 2 | | | | | | | | |

## Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: 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** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** | **11** |
| **MIC** | **N of resistant isolates** | **11** | **4** | **11** | **11** | **7** | **6** | **0** | **1** | **0** | **6** | **10** | **9** | **0** | **9** |
| <=0.015 | | | | | | | 2 | | | | | | | | |
| <=0.03 | | | | | | | | | | 11 | | | | | |
| 0.03 | | | | | | | 3 | | | | | | | | |
| <=0.25 | | | | | | | | | | | | | | 8 | |
| 0.25 | | | | | | | 1 | | | | | | | | |
| <=0.5 | | | | | | | | | 5 | | | | | | |
| 0.5 | | | | | | | | | | | | | | 3 | 1 |
| <=1 | | | | | | | | 11 | | | | | | | |
| 1 | | | | | 1 | | | | 4 | | | | | | 1 |
| <=2 | | | | | | | | | | | | | 1 | | |
| 2 | | | | | 1 | | | | 1 | | | | | | |
| <=4 | | | | | | | | | | | 5 | | | | |
| 4 | | | 1 | 2 | 3 | | | | | | | | 1 | | |
| >4 | | | | 9 | | | | | | | | | | | |
| <=8 | | | | | | 4 | | | | | | 1 | | | |
| 8 | | | 5 | | 1 | | | | | | | | | | |
| >8 | | | | | 5 | | 5 | | | | | | | | |
| 16 | | | 1 | | | | | | | | | | | | |
| 32 | | | 1 | | | 1 | | | | | | | | | |
| >32 | | | | | | | | | 1 | | | | | | 9 |
| 64 | | | 1 | | | 1 | | | | | | | 2 | | |
| >64 | | 11 | 2 | | | | | | | | | | 7 | | |
| 128 | | | | | | | | | | | 1 | | | | |

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

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON pnl2

Analytical Method:

Country of Origin: Portugal

| AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | | Cefoxitin | Ceftazidim | | Ceftazidime + Clavulanic acid | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Cefotaxime synergy test** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | | **Not Available** | | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| **Ceftazidime synergy test** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Not Available** | **Positive/Present** | **Negative/Absent** | **Not Available** | **Not Available** | **Not Available** | **Not Available** |
| **ECOFF** | **0.125** | **0.25** | **0.25** | **0.25** | **8** | **0.5** | **0.5** | **0.5** | **0.5** | **0.064** | **0.5** | **0.125** | **32** |
| **Lowest limit** | **0.064** | **0.25** | **0.064** | **0.064** | **0.5** | **0.25** | **0.12** | **0.12** | **0.12** | **0.015** | **0.12** | **0.03** | **0.5** |
| **Highest limit** | **32** | **64** | **64** | **64** | **64** | **128** | **128** | **128** | **128** | **2** | **16** | **16** | **64** |
| **N of tested isolates** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** |
| **N of resistant isolates** | **22** | **23** | **6** | **6** | **7** | **22** | **5** | **5** | **5** | **1** | **0** | **0** | **0** |
| **MIC** | | | | | | | | | | | | | |
| <=0.015 | | | | | | | | | | 15 | | | |
| <=0.03 | | | | | | | | | | | | 22 | |
| 0.03 | | | | | | | | | | 5 | | | |
| <=0.064 | | | 17 | | | | | | | | | | |
| 0.064 | | | | | | | | | | 2 | | 1 | |
| <=0.12 | | | | | | | 1 | 8 | | | 10 | | |
| 0.12 | 1 | | | | | | | | | 1 | | | |
| 0.25 | 2 | | | | | | | 7 | 2 | | 11 | | |
| 0.5 | 2 | | | | | 1 | | | | | 2 | | |
| 1 | | | | 1 | 1 | 6 | | | | | | | |
| 2 | 5 | 1 | | | | 1 | | | | | | | 3 |
| 4 | 2 | 1 | 1 | 1 | 8 | 5 | | | 1 | | | | 3 |
| 8 | 6 | 1 | | 2 | 7 | 4 | | | 1 | | | | 15 |
| 16 | 3 | 4 | | 1 | 1 | 4 | | | 3 | | | | 1 |
| 32 | 2 | 6 | | | 1 | 2 | | | | | | | 1 |
| 64 | | 7 | | | 3 | | | | | | | | |

| | AM substance | Cefepime | Cefotaxim | Cefotaxime + Clavulanic acid | | Cefoxitin | Ceftazidim | Ceftazidime + Clavulanic acid | | | Ertapenem | Imipenem | Meropenem | Temocillin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cefotaxime synergy test | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | | Not Available | | Not Available | Not Available | Not Available | Not Available |
| | Ceftazidime synergy test | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Not Available | Positive/Present | Negative/Absent | Not Available | Not Available | Not Available | Not Available |
| | ECOFF | 0.125 | 0.25 | 0.25 | 0.25 | 8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.064 | 0.5 | 0.125 | 32 |
| | Lowest limit | 0.064 | 0.25 | 0.064 | 0.064 | 0.5 | 0.25 | 0.12 | 0.12 | 0.12 | 0.015 | 0.12 | 0.03 | 0.5 |
| | Highest limit | 32 | 64 | 64 | 64 | 64 | 128 | 128 | 128 | 128 | 2 | 16 | 16 | 64 |
| | N of tested isolates | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| MIC | N of resistant isolates | 22 | 23 | 6 | 6 | 7 | 22 | 5 | 5 | 5 | 1 | 0 | 0 | 0 |
| >64 | | | 3 | | | 2 | | | | | | | | |

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

Sampling Stage: Retail

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: ESBL MON

Analytical Method:

Country of Origin: Portugal

| | 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** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** |
| **MIC** | **N of resistant isolates** | **23** | **6** | **23** | **20** | **5** | **15** | **1** | **2** | **0** | **13** | **17** | **19** | **0** | **13** |
| <=0.015 | | | | | | | 4 | | | | | | | | |
| <=0.03 | | | | | | | | | | 23 | | | | | |
| 0.03 | | | | | | | 4 | | | | | | | | |
| <=0.25 | | | | | | | | | | | | | | 20 | 4 |
| 0.25 | | | | | | | 3 | | | | | | | | |
| <=0.5 | | | | | 3 | | | | 16 | | | | | | |
| 0.5 | | | | | | | 4 | | | | | | | 2 | 6 |
| <=1 | | | | | | | | 21 | | | | | | | |
| 1 | | | | | 3 | | 1 | | 4 | | | | | 1 | |
| <=2 | | | 1 | | | | | | | | | | 2 | | |
| 2 | | | | 1 | 4 | | | 1 | 1 | | | | | | |
| <=4 | | | | | | | | | | | 8 | | | | |
| 4 | | | 10 | 1 | 4 | | | 1 | | | | | 2 | | 1 |
| >4 | | | | 21 | | | | | | | | | | | |
| <=8 | | | | | | 15 | | | | | | 2 | | | |
| 8 | | | 5 | | 4 | | 1 | | | | 1 | | | | |
| >8 | | | | | 5 | | 6 | | | | | | | | |
| 16 | | | 1 | | | 3 | | | | | 1 | 2 | | | |
| 32 | | | 1 | | | 2 | | | 2 | | 1 | 2 | 2 | | |
| >32 | | | | | | | | | | | | | | | 12 |
| 64 | | | 2 | | | 2 | | | | | | | 3 | | |
| >64 | | 23 | 3 | | | | | | | | | | 14 | | |
| 128 | | | | | | 1 | | | | | 2 | | | | |

| | AM substance | Ampicillin | Azithromycin | Cefotaxim | Ceftazidim | Chloramphenicol | Ciprofloxacin | Colistin | Gentamicin | Meropenem | Nalidixic acid | Sulfamethoxazole | Tetracycline | Tigecycline | Trimethoprim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ECOFF** | **8** | **16** | **0.25** | **0.5** | **16** | **0.064** | **2** | **2** | **0.125** | **16** | **64** | **8** | **1** | **2** |
| | **Lowest limit** | **1** | **2** | **0.25** | **0.5** | **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** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** | **23** |
| **MIC** | **N of resistant isolates** | **23** | **6** | **23** | **20** | **5** | **15** | **1** | **2** | **0** | **13** | **17** | **19** | **0** | **13** |
| >128 | | | | | | | | | | | 10 | | | | |
| >1024 | | | | | | | | | | | | 17 | | | |

## OTHER ANTIMICROBIAL RESISTANCE TABLES

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

| Programme Code | Matrix Detailed | Zoonotic Agent Detailed | Sampling Strategy | Sampling Stage | Sampling Details | Sampling Context | Sampler | Sample Type | Sampling Unit Type | Sample Origin | Comment | Total Units Tested | Total Units Positive |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CARBA MON | Cattle (bovine animals) - calves (under 1 year) | Escherichia coli, non-pathogenic, unspecified | Objective sampling | Slaughterhouse | N_A | Monitoring | Official sampling | animal sample - caecum | slaughter animal batch | Portugal | N_A | 289 | 0 |
| | Meat from bovine animals - fresh | Escherichia coli, non-pathogenic, unspecified | Objective sampling | Retail | N_A | Monitoring | Official sampling | food sample - meat | single (food/feed) | Portugal | N_A | 220 | 0 |
| | Meat from pig - fresh | Escherichia coli, non-pathogenic, unspecified | Objective sampling | Retail | N_A | Monitoring | Official sampling | food sample - meat | single (food/feed) | Portugal | N_A | 220 | 0 |
| | Pigs - fattening pigs | Escherichia coli, non-pathogenic, unspecified | Objective sampling | Slaughterhouse | N_A | Monitoring | Official sampling | animal sample - caecum | slaughter animal batch | Portugal | N_A | 254 | 0 |

European Food Safety Authority

# Latest Transmission set

| Table Name | Last submitted dataset transmission date |
|---|---|
| Antimicrobial Resistance | 23-Jul-2018 |
| Esbl | 23-Jul-2018 |
| Animal Population | 23-Jul-2018 |
| Disease Status | 23-Jul-2018 |
| Food Borne Outbreaks | 23-Jul-2018 |
| Prevalence | 23-Jul-2018 |

# Portugal, Text Forms 2017

**Table of contents**

## 1. Institutions and Laboratories involved in zoonoses monitoring and reporting

**Instituto Nacional de Investigação Agrária e Veterinária, I. P. (INIAV)**
**Laboratório Regional Veterinário (LRV)**
**Instituto Nacional de Saúde Doutor Ricardo Jorge, I. P. (INSA)**
**Instituto Português do Mar e da Atmosfera, I.P. (IPMA)**
**Autoridade de Segurança Alimentar e Económica (ASAE)**
**Direção Geral de Alimentação e Veterinária (DGAV)**
**Instituto de Financiamento da Agricultura e Pescas, I.P. (IFAP)**

**INIAV: laboratory supporting several official control and surveillance programs and plans, with analytical research on zoonotic agents in animal, food and feed samples. Also supports national AMR monitoring plan with analytical performance.**
**LRV: Autonomous Region of Azores' laboratory supporting several official control and surveillance programs and plans, with analytical research on zoonotic agents in animal, food and feed samples. Also supports national AMR monitoring plan with analytical performance obtaining the isolates that are tested for antimicrobial resistance at INIAV laboratory.**
**INSA: laboratory supporting national health system with investigation and analytical performance on FBO scope and analytical performance on food samples.**
**IPMA: laboratory supporting official control plans with analytical research on zoonotic agents in food (fishery products and LBM).**
**ASAE: laboratory performing official analytical control on food, mainly at retail stage.**
**DGAV: national competent authority with several official control and surveillance programs and plans applicable to animals, food and feed.**
**IFAP: Institute involved in animal and farms registration.**

## 2. Animal population

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

**Animal farms and bovine animals are legally obliged to be registered. Also the animal slaughter quantities are obliged to be reported.**
**Data are compiled in the IFAP's database and numbers on animals and farms are given based on the consultation of the database.**
**The quantities related with slaughtered animals are compiled in another database by meat inspectors. Numbers on slaughtered animals are given based on the consultation of the database.**

**2. Definitions used for different types of animals, herds, flocks and holdings as well as the production types covered**

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

**4. Geographical distribution and size distribution of the herds, flocks and holdings**

**5. Additional information**

## 3. General evaluation: *B. abortus* in animal - Cattle (bovine animals)

**1. History of the disease and/or infection in the country**

**Status as officially free of bovine brucellosis: In the Açores, there are 6 islands (Santa Maria, Faial, Graciosa, Pico, Flores and Corvo) that are Officially Free of Bovine Brucellosis, accordingly with Commission Decisions 2002/588/CE of 11th July 2002 and 2009/600/CE of 5th August. At mainland, the Algarve region was recognised as Officially Free of Bovine Brucellosis accordingly with Commission Decision 2012/204/UE of 19th April.**
**For more information, in relation to bovine brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_bovine-brucellosis_prt.pdf**

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

**3. Any recent specific action in the Member State or suggested for the European Union**

**4. Additional information**

## 4. Description of Monitoring/Surveillance/Control programmes system: *B. abortus* in animal - Cattle (bovine animals)

**1. Monitoring/Surveillance/Control programmes system**

**Sampling strategy: The herds are classified and sampled accordingly with Council Directive 64/432/EEC and Decreto-Lei No 244/2000 (Sep. 27th).**
**Frequency of the sampling: The herds are sampled accordingly with Council Directive 64/432/EEC and Decreto-Lei No 244/2000 (Sep. 27th).**
**Type of specimen taken: Blood, milk, organs, vaginal mucus, semen, aborted foetus and placenta.**
**Diagnostic/analytical methods used:**
**- Serology (live animals): Rose Bengal Test (RBT); Complement Fixation Test (CFT)**
**- Milk (live animals): ELISA test**
**- Organs (dead animals): bacteriology (isolation of the agent with differentiation of vaccine and field strains).**
**For more information, in relation to bovine brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_bovine-brucellosis_prt.pdf**

**2. Measures in place**

**An Eradication Programme for cattle is carried out and supervised by DGAV.**
**Vaccination is forbidden, but if an exceptional sanitary situation occurs, vaccination can be allowed with specific protocols between the Veterinary Authority and the owner(s) of the cattle.**
**Other preventive measures than vaccination in place: Pre-movement tests are mandatory accordingly with Council Directive 64/432/EEC.**
**Measures in case of the positive findings or single cases:**

- **Suspected Herd:**

**- Herd under official surveillance;**
**- Epidemiological survey;**
**- Animal movements are forbidden from and to the herd;**
**- Isolation of suspected animals in the herd;**
**- Sample collection for laboratory diagnosis.**

| |
|---|
| • **Positive Herd:**<br>**- Herd under official restrictions;**<br>**- Compulsory slaughter of all positive animals, under official supervision with sample collection for laboratory diagnosis;**<br>**- Animal movements are forbidden from and to the herd;**<br>**- Serological control of all remaining animals.**<br>• **Infected Herd:**<br>**- All measures mentioned for positive herds;**<br>**- Disinfection of all premises, equipment and materials;**<br>**- Thermic treatment of the milk.**<br>**For more information, in relation to bovine brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_bovine-brucellosis_prt.pdf** |
| **3. Notification system in place to the national competent authority** |
| **Yes** |
| **4. Results of investigations and national evaluation of the situation, the trends and sources of infection** |
| |
| **5. Additional information** |
| |

## 5. General evaluation: *Mycobacterium tuberculosis* complex (MTC) in animal - Cattle (bovine animals)

| |
|---|
| **1. History of the disease and/or infection in the country** |
| **Status as officially free of bovine tuberculosis: at mainland, the Algarve region was recognised as Officially Free of Bovine Tuberculosis accordingly with Commission Decision 2012/204/UE of 19th April.**<br>**For more information, in relation to bovine tuberculosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_bovine-tuberculosis_prt.pdf** |
| **2. Evaluation of status, trends and relevance as a source for humans** |
| |
| **3. Any recent specific action in the Member State or suggested for the European Union** |
| |
| **4. Additional information** |
| |

## 6. Description of Monitoring/Surveillance/Control programmes system: *Mycobacterium tuberculosis* complex (MTC) in animal - Cattle (bovine animals)

**1. Monitoring/Surveillance/Control programmes system**

**Sampling strategy: The herds are classified and sampled accordingly with Council Directive 64/432/EEC and National Dec. Lei No 272/2000, November 8th and National Dec. Lei No 79/2011, June 20th.**
**Frequency of the sampling: The herds are sampled accordingly with Council Directive 64/432/EEC and National Dec. Lei No 272/2000, November 8th and National Dec. Lei No 79/2011, June 20th.**
**Type of specimen taken: Blood and organs.**
**Diagnostic/analytical methods used:**
**- Animal: Intra-dermal comparative test;**
**- Blood: Gama-interferon;**
**- Organs: histopathology and bacteriology**.
**For more information, in relation to bovine tuberculosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_bovine-tuberculosis_prt.pdf**

**2. Measures in place**

**An Eradication Programme for Bovine Tuberculosis is carried out and supervised by DGAV.**
**Vaccination is forbidden.**
**Other preventive measures than vaccination in place: Pre-movement tests are mandatory accordingly with Council Directive 64/432/EEC.**
**Measures in case of the positive findings or single cases:**
**- Herd under official restriction;**
**- Isolation of suspected or infected animals in the herd;**
**- Positive animals compulsory slaughtered, under official supervision, with sample collection for laboratory diagnosis;**
**- Animal movements are forbidden from and to the herd;**
**- Disinfection of all premises, equipment and materials;**
**- Testing of all remaining animals;**
**- Thermic treatment of the milk;**
**- Epidemiological survey**.
**For more information, in relation to bovine tuberculosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_bovine-tuberculosis_prt.pdf**

**3. Notification system in place to the national competent authority**

**Yes**

**4. Results of investigations and national evaluation of the situation, the trends and sources of infection**

**5. Additional information**

## 7. General evaluation: *Lyssavirus* (rabies)

| |
|---|
| **1. History of the disease and/or infection in the country** |
| **Portugal is free from Rabies since 1961. In August 1984, the national authorities detected a case of rabies in a 2 months old puppy that came from Maputo (Mozambique) and entered in Portugal on the 10th August 1984. The animal was put in quarantine and euthanized. The disease was confirmed by immunofluorescence on the 31st August. The veterinary authorities maintained the implemented sanitary and prophylactic measures and, since then, no further cases were detected and Portugal maintained its free status.** |
| **2. Evaluation of status, trends and relevance as a source for humans** |
| |
| **3. Any recent specific action in the Member State or suggested for the European Union** |
| |
| **4. Additional information** |
| |

## 8. Description of Monitoring/Surveillance/Control programmes system: *Lyssavirus* (rabies)

| |
|---|
| **1. Monitoring/Surveillance/Control programmes system** |
| **Rage is a national notifiable disease since 1953.**<br>**Surveillance is based on the investigation of any clinical suspicion and aggression episodes: any dog or cat that bites a human or another animal is considered under suspicion and, therefore, is kept under veterinary surveillance in order to discard any case of rabies.**<br>**Laboratorial confirmation: positive result at the direct immunofluorescence test.** |
| **2. Measures in place** |
| **The control program is defined in the national law (Decreto-Lei No 314/2003, of December 17th) and consists in Vaccination and Surveillance Measures for epidemiological survey with definition of specific rules for owners, for commercial purposes, for exhibits and for the entrance of animals in the country.**<br>**The measures are defined in the national and EU legislation.**<br>**National legislation (Decreto-Lei No 314/2003, of December the 17th and Portaria No 264/2013, of August the 16th established the obligation of vaccination against rabies in all dogs older than 3 month. Vaccination may be performed either by Municipality Veterinarians in the official campaign or by small animal practitioners in their private clinics. Surveillance is based on the investigation of any clinical suspicion and aggression episodes: any dog or cat that bites a human or another animal is considered under suspicion and, therefore, is kept under veterinary surveillance in order to discard any case of rabies.**<br>**In Portugal the annual rabies vaccination of dogs is compulsory since 1925. Vaccination in cats is voluntary.** |
| **3. Notification system in place to the national competent authority** |
| **Yes** |
| **4. Results of investigations and national evaluation of the situation, the trends and sources of infection** |
| |

| 5. Additional information |
|---|
| **At the rabies vaccination campaign, whenever the animals present show signs of leishmaniosis, dermatophytosis or mange, the municipality veterinarian notifies the respective owner to perform diagnostic tests in the animal and to treat the zoonosis in case of a positive result.** |

## 9. General evaluation: *B. melitensis* in animal - Sheep

| 1. History of the disease and/or infection in the country |
|---|
| **Status as officially free of ovine brucellosis: The Região Autónoma dos Açores is officially free of sheep and goat brucellosis, accordingly with Commission Decision 2003/44/CE of the 17th January 2003.**<br>**For more information, in relation to sheep and goat brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_goat-brucellosis_prt.pdf** |
| **2. Evaluation of status, trends and relevance as a source for humans** |
| |
| **3. Any recent specific action in the Member State or suggested for the European Union** |
| |
| **4. Additional information** |
| |

## 10. Description of Monitoring/Surveillance/Control programmes system: *B. melitensis* in animal - Sheep

| 1. Monitoring/Surveillance/Control programmes system |
|---|
| **Sampling strategy: The herds are classified and sampled accordingly with Council Directive 91/68/EEC of 28 January 1991 on animal health conditions governing intra-Community trade in sheep and goat animals and Decreto-Lei No 244/2000 (Sep. 27th).**<br>**Frequency of the sampling: The herds are sampled accordingly with Council Directive 91/68/EEC of 28 January 1991 on animal health conditions governing intra-Community trade in sheep and goat animals and Decreto-Lei No 244/2000 (Sep. 27th).**<br>**Type of specimen taken: Blood, organs, vaginal mucus, semen, aborted foetus and placenta.**<br>**Diagnostic/analytical methods used:**<br>**- Serology (live animals): Rose Bengal Test (RBT); Complement Fixation Test (CFT)**<br>**- Organs (dead animals): bacteriology (isolation of the agent with differentiation of vaccine and field strains).**<br>**For more information, in relation to sheep and goat brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_goat-brucellosis_prt.pdf** |
| **2. Measures in place** |
| **Vaccination of young animals with REV1 is performed in some of the mainland regions: Norte, Centro, Lisboa e Vale do Tejo and Algarve.**<br>**Other preventive measures than vaccination in place: Pre-movement tests are mandatory for animals intended for the replacement in depopulated herds.**<br>**An Eradication Programme for sheep and goat is carried out and supervised by DGAV.**<br>**Measures in case of the positive findings or single cases:**<br>• **Suspected Herd:** |

**- Herd under official surveillance;**
**- Epidemiological survey;**
**- Animal movements are forbidden from and to the herd;**
**- Isolation of suspected animals in the herd;**
**- Sample collection for laboratory diagnosis.**

- **Positive Herd:**

**- Herd under official restrictions;**
**- Epidemiological survey;**
**- Compulsory slaughter of all positive animals, under official supervision with sample collection for laboratory diagnosis;**
**- Animal movements are forbidden from and to the herd;**
**- Serological control of all remaining animals.**

- **Infected Herd:**

**- All measures mentioned for positive herds;**
**- Disinfection of all premises, equipment and materials;**
**- Thermic treatment of the milk.**
**For more information, in relation to sheep and goat brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_goat-brucellosis_prt.pdf**

**3. Notification system in place to the national competent authority**

**Yes**

**4. Results of investigations and national evaluation of the situation, the trends and sources of infection**

**5. Additional information**

## 11. General evaluation: *B. melitensis* in animal - Goats

**1. History of the disease and/or infection in the country**

**Status as officially free of caprine brucellosis: The Região Autónoma dos Açores is officially free of sheep and goat brucellosis, accordingly with Commission Decision 2003/44/CE of the 17th January 2003.**
**For more information, in relation to sheep and goat brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_goat-brucellosis_prt.pdf**

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

**3. Any recent specific action in the Member State or suggested for the European Union**

**4. Additional information**

## 12. Description of Monitoring/Surveillance/Control programmes system: *B. melitensis* in animal - Goats

**1. Monitoring/Surveillance/Control programmes system**

**Sampling strategy: The herds are classified and sampled accordingly with Council Directive 91/68/EEC of 28 January 1991 on animal health conditions governing intra-Community trade in sheep and goat animals and Decreto-Lei No 244/2000 (Sep. 27th).**
**Frequency of the sampling: The herds are sampled accordingly with Council Directive 91/68/EEC of 28 January 1991 on animal health conditions governing intra-Community trade in sheep and goat animals and Decreto-Lei No 244/2000 (Sep. 27th).**
**Type of specimen taken: Blood, organs, vaginal mucus, semen, aborted foetus and placenta.**
**Diagnostic/analytical methods used:**
**- Serology (live animals): Rose Bengal Test (RBT); Complement Fixation Test (CFT)**
**- Organs (dead animals): bacteriology (isolation of the agent with differentiation of vaccine and field strains).**
**For more information, in relation to sheep and goat brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_goat-brucellosis_prt.pdf**

**2. Measures in place**

**Vaccination of young animals with REV1 is performed in some of the mainland regions: Norte, Centro, Lisboa e Vale do Tejo and Algarve.**
**Other preventive measures than vaccination in place: Pre-movement tests are mandatory for animals intended for the replacement in depopulated herds.**
**An Eradication Programme for sheep and goat is carried out and supervised by DGAV.**
**Measures in case of the positive findings or single cases:**

- **Suspected Herd:**

**- Herd under official surveillance;**
**- Epidemiological survey;**
**- Animal movements are forbidden from and to the herd;**
**- Isolation of suspected animals in the herd;**
**- Sample collection for laboratory diagnosis.**

- **Positive Herd:**

**- Herd under official restrictions;**
**- Epidemiological survey;**
**- Compulsory slaughter of all positive animals, under official supervision with sample collection for laboratory diagnosis;**
**- Animal movements are forbidden from and to the herd;**
**- Serological control of all remaining animals.**

- **Infected Herd:**

**- All measures mentioned for positive herds;**
**- Disinfection of all premises, equipment and materials;**
**- Thermic treatment of the milk.**
**For more information, in relation to sheep and goat brucellosis, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2017-8_dec-2016-2444-ec_goat-brucellosis_prt.pdf**

**3. Notification system in place to the national competent authority**

**Yes**

**4. Results of investigations and national evaluation of the situation, the trends and sources of infection**

## 13. General evaluation: *Salmonella* in animal - *Gallus gallus* (fowl) - broilers

**1. History of the disease and/or infection in the country**

**For this information, in relation to broilers – *Gallus gallus* (fowl), refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_broiler_gal_prt.pdf**

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

**3. Any recent specific action in the Member State or suggested for the European Union**

**4. Additional information**

## 14. Description of Monitoring/Surveillance/Control programmes system: *Salmonella* in animal - *Gallus gallus* (fowl) - broilers

**1. Monitoring/Surveillance/Control programmes system**

**Sampling strategy (broiler flocks): Sampling is accomplished by the food business operator and by the competent authority. The sampling is done at the holding. Sampling on the initiative of the food business operator shall take place within three weeks before the birds are moved to the slaughterhouse. Sampling by the competent authority includes each year at least one flock of broilers on 10% of the holdings with more than 5 000 birds. It is done on a risk basis approach and every time that the competent authority considers it necessary.**
**Frequency of the sampling (broiler flocks): 3 weeks prior to slaughter, at farm.**
**Type of specimen taken (broiler flocks): Faeces (boot swabs).**
**Methods of sampling (description of sampling techniques): At least two pairs of boot swabs shall be taken. For free range flocks of broilers, samples shall only be collected in the area inside the house. All boot swabs will be pooled into one sample. In flocks with less than 100 broilers, when the access to the houses is not possible, the boot swabs may be replaced by hand drag swabs and rubbed over surfaces contaminated with fresh faeces, or if not feasible, by other sampling techniques for faeces fit for the intended purpose. It shall be ensured that all sections in a house are represented in the sampling in a proportionated way. Each pair should cover about 50% of the area of the house. On completion of sampling the boot swabs shall be carefully removed so as not to dislodge adherent material. Boot swabs may be inverted to retain material. They shall be placed in a bag or pot and labelled.**
**Case definition: A flock of broilers is considered positive where the presence of *Salmonella* Enteritidis (other than vaccine strains) and/or *Salmonella* Typhimurium or *Salmonella* typhimurium -Like is detected in the flock at any occasion.**
**Diagnostic/analytical methods used: Bacteriological method: ISO 6579:2002.**

**For more information, in relation to broilers – *Gallus gallus* (fowl), refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_broiler_gal_prt.pdf**

**2. Measures in place**

**The strategy in place is to reinforce surveillance, reinforce biosecurity measures, slaughter the positive flocks and restocking only when environmental samples are negative for *Salmonella*, with birds from flocks or herds that have undergone controls accordingly with the legislation**

**requirements. The strategy includes also a close cooperation with the associations of producers to implement different means to raise awareness of the producers. The Official Services have developed guidelines for the producer, as a tool in order to guide the implementation of the national programme.**

**Measures in case of the positive findings or single cases:**

- **When there is a positive case in a flock**

**- *Salmonella* spp detection;**
**- Notification of the food business operator;**
**- Flock under official control (restriction);**
**- Forcing to keep update records.**

- **Whenever the results from serotyping are different from the serotypes relevant to the national programme, than:**

**- Additional biosecurity measures;**
**- Free practice;**
**- The official control measures are withdrawn.**

- **When the result is serotype S. Enteritidis and/or S. Typhimurium than the flock will continue under official restriction:**

**- Flock surveillance (under official control).**
**- After the slaughter of the positive flock the holding and the environment must be cleaned and disinfected.**
**- The food business operator must collect environmental samples.**
**- The restocking of animals must take place from flocks or herds that have undergone controls (with negative results) accordingly with the legislation requirements.**

**For more information, in relation to broilers – *Gallus gallus* (fowl), refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_broiler_gal_prt.pdf**

**3. Notification system in place to the national competent authority**

**Yes**

**4. Results of investigations and national evaluation of the situation, the trends and sources of infection**

**5. Additional information**

## 15. General evaluation: *Salmonella* in animal - *Gallus gallus* (fowl) - breeding flocks, unspecified

**1. History of the disease and/or infection in the country**

**For this information, in relation to breeding flocks – *Gallus gallus* (fowl), refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_breeding_gal_prt.pdf**

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

**3. Any recent specific action in the Member State or suggested for the European Union**

**4. Additional information**

**In relation to laying hens, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_laying_gg_prt.pdf**

## 16. Description of Monitoring/Surveillance/Control programmes system: *Salmonella* in animal - *Gallus gallus* (fowl) - breeding flocks, unspecified

**1. Monitoring/Surveillance/Control programmes system**

**Sampling strategy (breeding flocks - separate elite, grand parent and parent flocks when necessary): The sampling frame shall cover all adult breeding flocks of *Gallus gallus* comprising at least 250 birds. Sampling is accomplished by the food business operator and by the official authority. Sampling is done at the holding. At the initiative of the food business operator, samples will be taken at day old, 4 weeks old birds, 2 weeks before laying phase and during the laying period, every three weeks. At day-old sampling shall consist of internal linings of delivery boxes and dead chicks. At 4 weeks old and at two weeks before the laying phase, sampling shall consist of pooled faeces made up of separate samples of fresh faeces each weighing no less than 1 g taken at random from a number of sites in the building in which the birds are kept. During the laying phase sampling will consist of 5 boot swabs representative of all parts of the house. In cage breeding flocks, sampling consists of naturally mixed faeces from dropping belts, scrapers or deep pits. 2 samples of at least 150 g will be collected to be tested individually. At the initiative of the official services sampling is done 2 times during the laying phase.**

**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: Day-old chicks, at the age of 4 weeks and 2 weeks before moving to the laying phase.**
- **Breeding flocks (separate elite, grand parent and parent flocks when necessary) - Production period: Every 3 weeks.**

**Type of specimen taken:**

- **Breeding flocks (separate elite, grand parent and parent flocks when necessary) - Day-old chicks: Internal linings of delivery boxes and dead chicks.**
- **Breeding flocks (separate elite, grand parent and parent flocks when necessary) - Rearing period: Faeces.**
- **Breeding flocks (separate elite, grand parent and parent flocks when necessary) - Production period: Faeces / boot swabs.**

**Type of specimen taken:**

- **Breeding flocks (separate elite, grand parent and parent flocks when necessary) - Day-old chicks: Internal linings of delivery boxes and dead chicks.**
- **Breeding flocks (separate elite, grand parent and parent flocks when necessary) - Rearing period: Faeces.**
- **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: The sample shall consist of a minimum of one composite sample of visibly soiled hatcher basket liners. The food business operator must sample all dead birds at arrival.**
- **Breeding flocks (separate elite, grand parent and parent flocks when necessary) - Rearing period: At 4 weeks old and 2 weeks before the laying phase the sampling will consist of faecal samples. Pooled faeces made up of separate samples of fresh faeces each weighing no less than 1 g taken at random from a number of sites in the building in which the birds are kept.**
- **Breeding flocks - Production period: During the laying phase 5 pairs of boot swabs walking around to be done in a way which will sample representatively all parts of the sector. In cage breeding flocks, sampling consists of naturally mixed faeces from dropping belts, scrapers or deep pits. 2 samples of at least 150 g will be collected to be tested individually.**

**Case definition:**

- **Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks, Rearing period and Production period - At least one positive sample to S. Enteritidis, S. Typhimurium, S. Typhimurium- Like, S. Hadar, S. Virchow and/or S. Infantis.**

**Diagnostic/analytical methods used:**

- **Breeding flocks (separate elite, grand parent and parent flocks when necessary): Day-old chicks, Rearing period and Production period - Bacteriological method: ISO 6579:2002.**

**For more information, in relation to breeding flocks – *Gallus gallus* (fowl), refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_breeding_gal_prt.pdf**

**2. Measures in place**

**Breeding flocks (separate elite, grand parent and parent flocks when necessary): Vaccination is voluntary. Compulsive vaccination against *Salmonella* Enteritidis is done in the restocking, after the slaughter of a positive flock.**

**The strategy in place is to reinforce surveillance, reinforce biosecurity measures, slaughter the positive flocks and restocking only when environmental samples are negative for *Salmonella*, with birds from flocks or herds that have undergone controls accordingly with the legislation requirements, with negative results. All the restocking birds must be vaccinated against *Salmonella*. There is also a focus on biosecurity measures in the holdings. The strategy includes also a close cooperation with the associations of producers to implement different means to raise awareness of the producers. The Official Services have developed guidelines for the producer, as a tool in order to guide the implementation of the national programme.**

**Measures in case of the positive findings or single cases:**

- **In the case of positive results for *Salmonella* Enteritidis and/or *Salmonella* Typhimurium additional biosecurity measures are implemented, sanitary restriction of the flock and sanitary surveillance of the holding are imposed.**
- **Destination of birds: The slaughter of the flock will be carried out in an approved slaughterhouse and after the authorisation of Regional Veterinarian Services. Day-old-chicks must be killed and destroyed.**
- **Destination of eggs: Hatching eggs will be eliminated as animal by-products. Non-incubated eggs from positive flocks must be, at option of the FBO:**
    - **eliminate as by-products or**

- forward to egg product units to be heat treated.
- After the slaughter of the positive flock the holding and the environment must be cleaned and disinfected.
- The food business operator must collect environmental samples.
- The restocking of animals must take place from flocks or herds that have undergone controls (with negative results) accordingly with the legislation requirements. All the restocking birds must be vaccinated against *Salmonella* Enteritidis.

**For more information, in relation to breeding flocks – *Gallus gallus* (fowl), refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_breeding_gal_prt.pdf**

**3. Notification system in place to the national competent authority**

**Yes**

**4. Results of investigations and national evaluation of the situation, the trends and sources of infection**

**5. Additional information**

## 17. General evaluation: *Salmonella* in Turkeys - breeding flocks and meat production flocks

**1. History of the disease and/or infection in the country**

**For this information, in relation to fattening turkeys, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_fattening_turkeys_prt.pdf**

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

**3. Any recent specific action in the Member State or suggested for the European Union**

**4. Additional information**

## 18. Description of Monitoring/Surveillance/Control programmes system: *Salmonella* in Turkeys - breeding flocks and meat production flocks

**1. Monitoring/Surveillance/Control programmes system**

**Sampling strategy (breeding flocks - separate elite, grand parent and parent flocks when necessary): There are no breeding flocks of turkeys in Portugal.**
**Meat production flocks: Sampling is accomplished by the food business operator and by the competent authority. The sampling is done at the holding. Sampling on the initiative of the food business operator takes place within three weeks before the birds are moved to the slaughterhouse. Sampling by the competent authority includes once a year, all flocks on 10% of the holdings with at least 500 fattening turkeys and all flocks on the holding when one flock tested positive for *Salmonella* Enteritidis or *Salmonella* Typhimurium in samples taken by the food business operator, unless the meat of the turkeys in the flocks is destined for industrial heat**

**treatment or another treatment to eliminate *Salmonella*, and all flocks on the holding when one flock tested positive for *Salmonella* Enteritidis or *Salmonella* Typhimurium during the previous round in samples taken by the food business operator, and each time the competent authority considers it necessary.**
**Frequency of the sampling in meat production flocks: 3 weeks prior to slaughter/ 6 weeks prior to slaughter.**
**Type of specimen taken in meat production flocks: Faeces.**
**Methods of sampling (description of sampling techniques) in meat production flocks: At least two pairs of boot swabs shall be taken. For free range flocks, samples will only be collected in the area inside the house. All boot swabs must be pooled into one sample. In flocks with less than 100 turkeys, where it is not possible to use boot swabs as access to the houses is not possible, they may be replaced by hand drag swabs, where the boot swabs or socks are wornover, gloved hands and rubbed over surfaces contaminated with fresh faeces, or if not feasible, by other sampling techniques for faeces fit for the intended purpose. It shall be ensured that all sections in a house are represented in the sampling in a proportionate way. Each pair should cover about 50 % of the area of the house. On completion of sampling the boot/sock swabs shall be carefully removed so as not to dislodge adherent material. Boot swabs may be inverted to retain material. They shall be placed in a bag or pot and labelled.**
**Case definition:**

- **Meat production flocks - Rearing period: A flock of turkeys is considered positive where the presence of *Salmonella* Enteritidis and/or *Salmonella* Typhimurium including *Salmonella* Typhimurium -Like (other than vaccine strains) is detected in the flock at any occasion.**

**Diagnostic/analytical methods used**

- **Meat production flocks - Rearing period: Bacteriological method: ISO 6579:2002.**

**For more information, in relation to fattening turkeys, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_fattening_turkeys_prt.pdf**

**2. Measures in place**

**Breeding flocks (separate elite, grand parent and parent flocks when necessary):**
**The strategy in place is to reinforce surveillance, reinforce biosecurity measures, slaughter the positive flocks and restocking only when environmental samples are negative for *Salmonella*, with birds from flocks or herds that have undergone controls (with negative results) accordingly with the legislation requirements. The strategy includes also a close cooperation with the associations of producers to implement different means to raise awareness of the producers. The Official Services have developed guidelines for the producer, as a tool in order to guide the implementation of the national programme.**

**For more information, in relation to fattening turkeys, refer to the programme approved by the EC: https://ec.europa.eu/food/sites/food/files/safety/docs/cff_animal_vet-progs_2018-9_salmonella_fattening_turkeys_prt.pdf**

**3. Notification system in place to the national competent authority**

**Yes**

**4. Results of investigations and national evaluation of the situation, the trends and sources of infection**

## 19. General evaluation: *Trichinella* in animal - Pigs - animal sample

| |
|---|
| **1. History of the disease and/or infection in the country** |
| **Disease notifiable since 1953 by national law (Decreto-Lei No 39209, de 14 de Maio).**<br>**Cases of trichinelosis are not reported since 1960.** |
| **2. Evaluation of status, trends and relevance as a source for humans** |
| |
| **3. Any recent specific action in the Member State or suggested for the European Union** |
| |
| **4. Additional information** |
| |

## 20. Description of Monitoring/Surveillance/Control programmes system: *Trichinella* in animal - Pigs - animal sample

| |
|---|
| **1. Monitoring/Surveillance/Control programmes system** |
| **Sampling strategy and frequency of the sampling: All slaughtered animals are sampled.**<br>**Type of specimen taken: diaphragm pillars.**<br>**Methods of sampling (description of sampling techniques): As determined in Commission Implementing Regulation (EU) 2015/1375 of 10 August 2015.**<br>**Case definition: It is positive when there is detection of one larvae of *Trichinella*.**<br>**Diagnostic/analytical methods used: Mechanical digestion of pooled samples with magnetic stirrer (Regulation (EU) 2015/1375).** |
| **2. Measures in place** |
| |
| **3. Notification system in place to the national competent authority** |
| **Yes.** |
| **4. Results of investigations and national evaluation of the situation, the trends and sources of infection** |
| **Cases of trichinelosis are not reported since 1960.** |
| **5. Additional information** |
| **Solipeds are also sampled: tongue, diaphragm pillars and masseter.**<br>**Special training in *Trichinella* detection on slaughterhouses and game activities is given to the meat inspection team.** |

## 21. Description of Monitoring/Surveillance/Control programmes system: *Trichinella* in Wild Boars

| |
|---|
| **1. Monitoring/Surveillance/Control programmes system** |
| **National Plan for Sanitary Surveillance of Large Wild Game – Surveillance plan in Large Wild Game that includes testing for several diseases: *Trichinella*, African Swine Fever, Swine Fever, Aujeszky disease, Cysticercosis and skin affections.**<br>**Sampling strategy and frequency of the sampling: All slaughtered animals are sampled.**<br>**Type of specimen taken: tongue, diaphragm pillars, masseter.**<br>**Methods of sampling (description of sampling techniques): As determined in Commission** |

| |
|---|
| **Implementing Regulation (EU) 2015/1375 of 10 August 2015.**<br>**Case definition: It is positive when there is detection of one larvae of *Trichinella*.**<br>**Diagnostic/analytical methods used: Mechanical digestion of pooled samples with magnetic stirrer (Regulation (EU) 2015/1375).** |
| **2. Measures in place** |
| ***Trichinella* official testing on Wild Boars from selected hunting events. The testing is performed by the NRL for *Trichinella*.** |
| **3. Notification system in place to the national competent authority** |
| **Yes** |
| **4. Results of investigations and national evaluation of the situation, the trends and sources of infection** |
| **In the *Trichinella* testing carried out on Wild Boars from hunting under the National Plan for Sanitary Vigilance of Large Wild Game, at the end of 2017, there were 3 positive cases in animals from the region of Trás-os-Montes, near the border with Spain. The species identified was *Trichinella britovi*. The meat of these animals was collected and destroyed.**<br>**These were the first *Trichinella* positive cases in Wild Boars in the last 10 years of official sampling.** |
| **5. Additional information** |
| **Special training in *Trichinella* detection on slaughterhouses and game activities is given to the meat inspection team.** |

## 22. Institutions and laboratories involved in antimicrobial resistance monitoring and reporting

**Instituto Nacional de Investigação Agrária e Veterinária, I. P. (INIAV)**
**Laboratório Regional Veterinário (LRV)**

**INIAV: laboratory supporting several official control and surveillance programs and plans, with analytical research on zoonotic agents in animal, food and feed samples. Also supports national AMR monitoring plan with analytical performance.**
**LRV: Autonomous Region of Azores' laboratory supporting several official control and surveillance programs and plans, with analytical research on zoonotic agents in animal, food and feed samples. Also supports national AMR monitoring plan with analytical performance obtaining the isolates that are tested for antimicrobial resistance at INIAV laboratory.**

## 23. General Antimicrobial Resistance Evaluation

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

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

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

**Preparation of a joint action for the Reduction of collistin consumption on treatment of infectious diseases in swine producing farms in Portugal. Several partners were involved considering data from the selling of collistin in Portugal and considering also the known data for the surveillance, accordingly with the surveillance Programme undertaken in Portugal since 2014.**

**4. Any specific action decided in the Member State or suggestions to the European Union for actions to be taken against food-borne AMR threat**

**Whenever an antimicrobial (considering the B1 list of substances searched in the National Residue Monitoring Plan – NRMP) is found, the competent authority undergoes an extra official control to the farm in order to verify compliance of Legal Requirements regarding Veterinary Medicine administration in farm animals, including records, Food Chain Information and prescription.**

**5. Additional information**

**Accordingly with recent strategies adopted not only by the EU, but also by the WHO, OIE, FAO a National Plan was developed in Portugal, during the year of 2017, compromising three Ministries (Health, Agriculture and Environment) towards the fight against Antimicrobial Resistance. The National Strategic Plan was developed and will be in place for the period 2018-2020.**
**The strategic goals are:**

1. **Improve and pursue the goals and strategy behind the One Health concept.**
2. **Improve awareness and understanding of antimicrobial resistance.**
3. **Strengthen the knowledge and evidence base through surveillance, monitoring and research.**
4. **Reduce the incidence of infection.**
5. **Optimise the use of antimicrobial medicines in human and animal health.**
6. **Develop the economic case for sustainable investments that takes account of the needs for new medicines, diagnostic tools, vaccines and other relevant interventions.**
7. **Better coordination and implementation of EU coordination and implementation of EU rules to tackle AMR**

## 24. General Description of Antimicrobial Resistance Monitoring: Isolates of *Escherichia coli*, non-pathogenic in fattening pigs

**1. General description of sampling design and strategy**

**The isolates were collected under Decision 2013/652/EU with the objective of testing for antimicrobial susceptibility.**

**2. Stratification procedure per animal population and food category**

**The sampling plan was designed to obtain 170 isolates of Indicator commensal *E. coli* and 210 isolates of ESBL-or AmpC-or carbapenemase-producing *E. coli*, from 300 representative caecal samples from fattening pigs to test for antimicrobial susceptibility.**
**For the sample design it was used a prospective sampling strategy to cover the all year.**
**The first step was to identify the slaughterhouses where the fattening pigs are slaughtered and determine the number of samples to be collected in each one in function of the data on their capacity of slaughtering in 2015.**
**It was only used one isolate per epidemiological unit (herd), as it is determined by the legislation.**
**The sampling in pigs was executed in 8 slaughterhouses because they represent 64.5% of the all slaughtering.**
**The sampling plan was stratified per slaughterhouses by allocating the number of samples to be collected per slaughterhouse proportionally to the annual throughput of fattening pigs in each slaughterhouse in the previous year.**
**The number of isolates planned to be taken in each abattoir per year, was proportional allocated to each one, accordingly with the respective throughput.**
**After select the 8 abattoirs, we have considered the sum of their capacity and then calculate the allocation proportion (a.p.) of each one. The result of this calculation was the follow:**
**Abattoir A, a.p. 0,2013, 60 samples; Abattoir B, a.p. 0,1800, 54 samples; Abattoir C, a.p. 0,1586, 48 samples; Abattoir D, a.p. 0,1511, 45 samples; Abattoir E, a.p. 0,1124, 34 samples; Abattoir F, a.p. 0,0969, 29 samples; Abattoir G, a.p. 0,0499, 15 samples and Abattoir H, a.p. 0,0498, 15 samples.**
**The sampling has started in August and due to logistical reasons it was not possible to achieve the 300 samples collection (it was possible to collect 254 samples).**
**The number of isolates planned for monitoring AMR in Indicator commensal *E. coli* was achieved, except for one abattoir, where the number of isolates was lower than the allocated number to be analysed (less 30 in total); the absent 30 isolates were offset by the remainder abattoirs.**
**For ESBL-or AmpC-or Carbapenemase-producing *E. coli*, only in 3 abattoirs achieved it. In the other 5 abattoirs the number of available isolates was lower than the allocated number to be analysed (less 50 in total) and the total number of available isolates was lower than the required. The other abattoirs offset with 9 isolates.**
**The number of samples planned to collect in each slaughterhouse were divided by weeks in the different slaughterhouses, to facilitate the work of the laboratory.**
**All samples were collected in the first three days of the week (Monday to Wednesday) because of the reception days in the laboratory.**
**Accordingly, in all slaughterhouses we tested all new herds presented for slaughter in each selected day.**
**Failure to apply randomness criteria relates to the following factors:**
**- Small variability of the herds in each abattoir;**
**- Logistics of sampling in slaughterhouses and availability of transportation to the laboratories;**
**- Capacity and availability of laboratories to receive samples every day.**

**3. Randomisation procedure per animal population and food category**

**Please, see answer to point 2.**

**4. Analytical method used for detection and confirmation**

**All protocols followed in the isolation, identification and antimicrobial susceptibility testing are those recommended by the EURL-AR.**

| |
|---|
| **In the case of the voluntary specific monitoring on carbapenemase-producers, CARBA_SMART, a selective culture media from Biomérieux was used.** |
| **5. Laboratory methodology used for detection of antimicrobial resistance** |
| **Microdilution method using commercially available microplates from TREK (EUVSEC, EUVSEC2 and EUCAMP2).**<br>**Epidemiological cut-offs from EUCAST were used.** |
| **6. Results of investigation** |
| |
| **7. Additional information** |
| |

## 25. General Description of Antimicrobial Resistance Monitoring: Isolates of *Escherichia coli*, non-pathogenic in bovines under one year of age

| |
|---|
| **1. General description of sampling design and strategy** |
| **The isolates were collected under Decision 2013/652/EU with the objective of testing for antimicrobial susceptibility.** |
| **2. Stratification procedure per animal population and food category** |
| **The sampling plan was designed to obtain 170 isolates of Indicator commensal *E. coli* and 210 isolates of ESBL-or AmpC-or carbapenemase-producing E. coli, from 300 representative caecal samples from bovines under one year of age to test for antimicrobial susceptibility.**<br>**For the sample design it was used a prospective sampling strategy to cover the all year.**<br>**The first step was to identify the slaughterhouses where the bovines under one year of age are slaughtered and determine the number of samples to be collected in each one in function of the data on their capacity of slaughtering in 2016.**<br>**It was only used one isolate per epidemiological unit (herd), as it is determined by the legislation.**<br>**The sampling in bovines was executed in 7 slaughterhouses, representing 60,3% of the all slaughtering.**<br>**The sampling plan was stratified per slaughterhouses by allocating the number of samples to be collected per slaughterhouse proportionally to the annual throughput of bovines under one year of age in each slaughterhouse in the previous year.**<br>**The number of isolates planned to be taken in each abattoir per year, was proportional allocated to each one, accordingly with the respective throughput.**<br>**After select the 7 abattoirs, we have considered the sum of their capacity and then calculate the allocation proportion (a.p.) of each one. The result of this calculation was the follow:**<br>**Abattoir A, a.p. 0,2944, 88 samples; Abattoir B, a.p. 0,1916, 58 samples; Abattoir C, a.p. 0,1202, 36 samples; Abattoir D, a.p. 0,1141, 34 samples; Abattoir E, a.p. 0,1071, 32 samples; Abattoir F, a.p. 0,0898, 27 samples and Abattoir G, a.p. 0,0827, 25 samples.**<br>**The sampling has started in August and due to logistical reasons it was not possible to achieve the 300 samples collection (it was possible to collect 297 samples).**<br>**The number of isolates planned for monitoring AMR in Indicator commensal *E. coli* was achieved but for ESBL-or AmpC-or Carbapenemase-producing *E. coli*, only in 1 abattoir achieved it. In the other 6 abattoirs the number of available isolates was lower than the allocated number to be analysed (less 103 in total) and the total number of available isolates was lower than the required.**<br>**The number of samples planned to collect in each slaughterhouse were divided by weeks in the different slaughterhouses, to facilitate the work of the laboratory.**<br>**All samples were collected in the first three days of the week (Monday to Wednesday) because of the reception days in the laboratory.**<br>**Accordingly, in each selected day the sampling was done in animals coming from herds that were not sampled before.**<br>**Failure to apply randomness criteria relates to the following factors:**<br>**- Small variability of the herds in each abattoir;** |

| |
|---|
| **- Logistics of sampling in slaughterhouses and availability of transportation to the laboratories;**<br>**- Capacity and availability of laboratories to receive samples every day.** |
| **3. Randomisation procedure per animal population and food category** |
| **Please, see answer to point 2.** |
| **4. Analytical method used for detection and confirmation** |
| **All protocols followed in the isolation, identification and antimicrobial susceptibility testing are those recommended by the EURL-AR.**<br>**In the case of the voluntary specific monitoring on carbapenemase-producers, CARBA_SMART, a selective culture media from Biomérieux was used.** |
| **5. Laboratory methodology used for detection of antimicrobial resistance** |
| **Microdilution method using commercially available microplates from TREK (EUVSEC, EUVSEC2 and EUCAMP2).**<br>**Epidemiological cut-offs from EUCAST were used.** |
| **6. Results of investigation** |
| |
| **7. Additional information** |
| |

## 26. General Description of Antimicrobial Resistance Monitoring: Isolates of *Salmonella* spp in pig carcasses

| |
|---|
| **1. General description of sampling design and strategy** |
| **The isolates were collected under Decision 2013/652/EU with the objective of testing for antimicrobial susceptibility.** |
| **2. Stratification procedure per animal population and food category** |
| **The isolates of *Salmonella* used for the monitoring of AMR under Decision 2013/652/EU were obtained from the samples of the food business operators, collected in order to verify compliance with process hygiene criteria set out in points 2.1.4 of Chapter 2 of Annex I of Regulation (EC) No 2073/2005.**<br>**It was not necessary to select representative isolates because we have submitted to AST all the isolates available during the year.**<br>**Only 38 isolates from pig carcasses swabs were received from the food business operators for AST testing.** |
| **3. Randomisation procedure per animal population and food category** |
| **Please, see answer to point 2.** |
| **4. Analytical method used for detection and confirmation** |
| **All protocols followed in the isolation, identification and antimicrobial susceptibility testing are those recommended by the EURL-AR.** |
| **5. Laboratory methodology used for detection of antimicrobial resistance** |
| **Epidemiological cut-offs from EUCAST were used.** |
| **6. Results of investigation** |
| |
| **7. Additional information** |
| **All the isolates of *Salmonella* and *Campylobacter* coming from the Food Zoonoses Monitoring Plan are tested for antimicrobial resistance.** |

## 27. General Description of Antimicrobial Resistance Monitoring: Isolates of *Salmonella* spp in bovine carcasses

| |
|---|
| **1. General description of sampling design and strategy** |
| **The isolates were collected under Decision 2013/652/EU with the objective of testing for antimicrobial susceptibility.** |
| **2. Stratification procedure per animal population and food category** |
| **The isolates of *Salmonella* used for the monitoring of AMR under Decision 2013/652/EU were obtained from the samples of the food business operators, collected in order to verify compliance with process hygiene criteria set out in points 2.1.3. of Chapter 2 of Annex I of Regulation (EC) No 2073/2005.**<br>**It was not necessary to select representative isolates because we have submitted to AST all the isolates available during the year.**<br>**Only 8 isolates from bovine carcasses swabs were received from the food business operators for AST testing.** |
| **3. Randomisation procedure per animal population and food category** |
| **Please, see answer to point 2.** |
| **4. Analytical method used for detection and confirmation** |
| **All protocols followed in the isolation, identification and antimicrobial susceptibility testing are those recommended by the EURL-AR.** |
| **5. Laboratory methodology used for detection of antimicrobial resistance** |
| **Epidemiological cut-offs from EUCAST were used.** |
| **6. Results of investigation** |
| |
| **7. Additional information** |
| **All the isolates of *Salmonella* and *Campylobacter* coming from the Food Zoonoses Monitoring Plan are tested for antimicrobial resistance.** |

## 28. General Description of Antimicrobial Resistance Monitoring: Isolates of *Escherichia coli*, non-pathogenic in fresh pig meat

| |
|---|
| **1. General description of sampling design and strategy** |
| **The isolates were collected under Decision 2013/652/EU with the objective of testing for antimicrobial susceptibility.** |
| **2. Stratification procedure per animal population and food category** |
| **The sampling plan was designed to obtain 210 isolates of ESBL-or AmpC-or carbapenemase-producing *E. coli*, from 300 representative samples of fresh pig meat to test for antimicrobial susceptibility.**<br>**The samples were collected at retail level, i.e., supermarkets and butchers.**<br>**For the sample design it was used a prospective sampling strategy to cover the all year.**<br>**The first step was to identify the NUTS-3 areas that represent 80% of the national population and allocate the samples in proportion to the size of the human population in each NUTS-3 areas.**<br>**It was collected only one sample per epidemiological unit which means one sample per lot of fresh meat.**<br>**The sampling plan was stratified per NUTS-3 by allocating the number of samples to be collected per NUTS-3 proportionally to the number of inhabitants in each NUTS-3 region.**<br>**We have selected 13 areas that represents 81,15% of the population. After, we have considered the sum of their capacity and then calculate the allocation proportion (a.p.) of each one. The result of this calculation was the follow:** |

| |
|---|
| **Área Metropolitana de Lisboa - a.p. 0,3292, 99 samples; Área Metropolitana do Porto - a.p. 0,2053, 62 samples; Região de Coimbra - a.p. 0,0537, 16 samples; Algarve - a.p. 0,0526, 16 samples; Tâmega e Sousa - a.p. 0,0505, 15 samples; Ave - a.p. 0,0496, 15 samples; Cávado - a.p. 0,0479, 14 samples; Região de Aveiro - a.p. 0,0432, 13 samples; Oeste - a.p. 0,0423, 13 samples; Região de Leiria - a.p. 0,0344, 10 samples; Região Autónoma da Madeira - a.p. 0,0312, 9 samples; Viseu Dão Lafões - a.p. 0,0312, 9 samples and Lezíria do Tejo - a.p. 0,0289, 9 samples.**<br>**Due to logistical reasons only 224 pig meat samples were collected instead of the targeted 300.**<br>**The samples planned to collect in each NUTS-3 area, were distributed for the retailers starting by the biggest category of outlets existing in each area.**<br>**In almost all the regions the main category are the big and medium supermarkets. That's why our sampling was majority done in this kind of shops.**<br>**In each shop the maximum number of samples collected was 5 samples.** |
| **3. Randomisation procedure per animal population and food category** |
| **Please, see answer to point 2.** |
| **4. Analytical method used for detection and confirmation** |
| **All protocols followed in the isolation, identification and antimicrobial susceptibility testing are those recommended by the EURL-AR.**<br>**In the case of the voluntary specific monitoring on carbapenemase-producers, CARBA_SMART, a selective culture media from Biomérieux was used.** |
| **5. Laboratory methodology used for detection of antimicrobial resistance** |
| **Microdilution method using commercially available microplates from TREK (EUVSEC, EUVSEC2 and EUCAMP2).**<br>**Epidemiological cut-offs from EUCAST were used.** |
| **6. Results of investigation** |
| |
| **7. Additional information** |
| |

## 29. General Description of Antimicrobial Resistance Monitoring: Isolates of *Escherichia coli*, non-pathogenic in fresh bovine meat

| |
|---|
| **1. General description of sampling design and strategy** |
| **The isolates were collected under Decision 2013/652/EU with the objective of testing for antimicrobial susceptibility.** |
| **2. Stratification procedure per animal population and food category** |
| **The sampling plan was designed to obtain 210 isolates of ESBL-or AmpC-or carbapenemase-producing *E. coli*, from 300 representative samples of fresh bovine meat to test for antimicrobial susceptibility.**<br>**The samples were collected at retail level, i.e., supermarkets and butchers.**<br>**For the sample design it was used a prospective sampling strategy to cover the all year.**<br>**The first step was to identify the NUTS-3 areas that represent 80% of the national population and allocate the samples in proportion to the size of the human population in each NUTS-3 areas.**<br>**It was collected only one sample per epidemiological unit which means one sample per lot of fresh meat.**<br>**The sampling plan was stratified per NUTS-3 by allocating the number of samples to be collected per NUTS-3 proportionally to the number of inhabitants in each NUTS-3 region.**<br>**We have selected 13 areas that represents 81,15% of the population. After, we have considered the sum of their capacity and then calculate the allocation proportion (a.p.) of each one. The result of this calculation was the follow:**<br>**Área Metropolitana de Lisboa - a.p. 0,3292, 99 samples; Área Metropolitana do Porto - a.p. 0,2053,** |

| |
|---|
| **62 samples; Região de Coimbra - a.p. 0,0537, 16 samples; Algarve - a.p. 0,0526, 16 samples; Tâmega e Sousa - a.p. 0,0505, 15 samples; Ave - a.p. 0,0496, 15 samples; Cávado - a.p. 0,0479, 14 samples; Região de Aveiro - a.p. 0,0432, 13 samples; Oeste - a.p. 0,0423, 13 samples; Região de Leiria - a.p. 0,0344, 10 samples; Região Autónoma da Madeira - a.p. 0,0312, 9 samples; Viseu Dão Lafões - a.p. 0,0312, 9 samples and Lezíria do Tejo - a.p. 0,0289, 9 samples.**<br>**Due to logistical reasons only 224 pig meat samples were collected instead of the targeted 300.**<br>**The samples planned to be collect in each NUTS-3 area, were distributed for the retailers starting by the biggest category of outlets existing in each area.**<br>**In almost all the regions the main category are the big and medium supermarkets. That's why our sampling was majority done in this kind of shops.**<br>**In each shop the maximum number collected was 5 samples.** |
| **3. Randomisation procedure per animal population and food category** |
| **Please, see answer to point 2.** |
| **4. Analytical method used for detection and confirmation** |
| **All protocols followed in the isolation, identification and antimicrobial susceptibility testing are those recommended by the EURL-AR.**<br>**In the case of the voluntary specific monitoring on carbapenemase-producers, CARBA_SMART, a selective culture media from Biomérieux was used.** |
| **5. Laboratory methodology used for detection of antimicrobial resistance** |
| **Microdilution method using commercially available microplates from TREK (EUVSEC, EUVSEC2 and EUCAMP2).**<br>**Epidemiological cut-offs from EUCAST were used.** |
| **6. Results of investigation** |
| |
| **7. Additional information** |
| |