

Croatia

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

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

IN 2015

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 Croatia during the year 2015.

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

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

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

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

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

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1 DISEASE STATUS

1.1 TUBERCULOSIS, MYCOBACTERIAL DISEASES

1.1.1 Mycobacterium in animals

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

Status as officially free of bovine tuberculosis during the reporting year

Free regions

Croatia has no regions officially tuberculosis free according to Directive 64/432/EEC.

Additional information

Designation of officially tuberculosis free herds according to Directive 64/432/EEC and fulfilling the requirements of point 4, Annex A, Part I of Directive 64/432/EEC started in 2010. On December 31 2015 - 99,9 % of bovine herds in Croatia is designated as officially free. Since 2013 bovine tuberculosis programme is co-financed by the European Commission.

Monitoring system

Sampling strategy

In 2015th all bovine animals older than 6 weeks had to be tested once a year in the whole country, for maintenance of officialy tuberculosis free (OTF) herd status , except bovine animals in fattening herds. Exception for fattening herds is based on average of the annual percentage of bovine herds confirmed as infected with tuberculosis determined at 31 December of each year. Since this number is below 1 % during the two most recent annual supervisory periods, animals for fattening within an isolated epidemiological unit are exempted from tuberculin testing in the whole Croatia. Also, goats older than 12 months kept for milk production in mixed herds (cattle and goats) had to be tested as well. Premovement testing : all bovine animals older than 6 weeks , except fattening animals moving from one to another fattening herd, have to have negative tuberculin skin test performed in the last 12 months. Animals with positive tuberculin skin test , in case false positive reaction is suspected, are retested after 42 days with comparative test. Positive reactors in areas where bovine tuberculosis was previously confirmed are sent to slaughter immediately, without retesting. Animals with inconclusive skin test are retested after 42 days with comparative test, except in cases animal originates from the herd in which tuberculosis was previously confirmed. In case of comparative test, all animals not testing negative on the second test are slaughtered. In one county (Sisak moslavina) where common pasture is practised , all animals had to be tested twice, before and after the common pasture season. All slaughtered positive reactor are sampled in the slaughterhouse according to Annex B, Part 1 of Directive 64/432/EEZ. Also, if characteristic patoanatomical changes are found during regular slaughter, it is manadatory to take samples for bacteriology .

Frequency of the sampling

All bovine animals older than 6 weeks one a year, with the exception of fattening animals. Bovine animals in county where common pasture is practised have to be tested twice per year, before and after the common pasture season. Sampling at the slaughterhouse- after slaughter of positive reactors mandatory samples according to Annex B, Part 1 of Directive 64/432/EEZ are sent for bacteriological investigation. In case of patoanatomical changes characteristic for bovine tubberculosis during regular slaughter samples of organs and lymph nodes with lesion are also sent for bacteriological investigation.

Type of specimen taken

Sampling in the slaughterhouse (according to Annex B, Part 1 of Directive 64/432/EEZ) - abnormal lymph nodes and parenchymatous organs such as lungs, liver, spleen, etc. In the cases when pathological lesions are not present, samples from the retropharyngeal, bronchial, mediastinal, supramammary, mandibular and some mesenteric lymph nodes and liver should be collected for examination and culture.

Methods of sampling (description of sampling techniques)

Animals are tested with tuberculin skin test according to Annex B, point 2 of Directive 64/432/EEZ. Tuberculin skin test is performed by authorised veterinary organisations. Samples at the slaughterhouse are taken by authorised veterinarian (from authorised veterinary organisation with special approval - control body) or by veterinary inspector. Sampling in case of routine slaughtering is according to pathoanatomical changes (abnormal lymph nodes and parenchymatous organs such as lungs, liver, spleen). Sampling of positive reactors: in case of pathoanatomical changes: abnormal lymph nodes and parenchymatous organs such as lungs, liver, spleen. If there is no path. changes samples from the retropharyngeal, bronchial, mediastinal, supramammary, mandibular, mesenteric lymph nodes and liver are taken.

Case definition

Bovine tuberculosis is considered to be confirmed if: a) Laboratory examination has confirmed agent from *M. tuberculosis* complex in tissue material from bovine animal b) Post mortem examination shows typical pathological changes, and agent from *M. tuberculosis* complex is confirmed by the laboratory examination c) Post mortem veterinary control at slaughter line found typical pathological changes, and agent from *M. tuberculosis* complex is confirmed by the laboratory examination. *Mycobacterium tuberculosis* complex : *Mycobacterium tuberculosis*, *Mycobacterium bovis*, *Mycobacterium caprae* and *Mycobacterium africanum*.

Diagnostic/analytical methods used

Intradermal testing- is performed according to Annex B, point 2 of Directive 64/432/EEZ. Sampling in the slaughterhouse and bacteriological examination are performed according to Annex B, Part 1 of Directive 64/432/EEZ.

Other preventive measures than vaccination in place

The guidelines of good manufacturing practice are stipulated by the Veterinary Act, the Food Act and the implementing secondary regulations. Continuous education of veterinarians, producers and animal holders is conducted through the Croatian Veterinary Chamber, the Croatian Chamber of Economy and the Advisory Services of the Ministry of Agriculture. Also, Animal Health Sector participates in education of farmers through stakeholders associations. Wildlife monitoring 2013 - programme to determine the presence of *Mycobacterium tuberculosis* complex in wild boar was implemented. 2014 and 2015 - Programme of wildlife monitoring continued on roe deers in Bjelovar-bilogora county, where most of the cases of bovine tuberculosis occur. *M. tuberculosis* complex was not isolated.

Control program/mechanisms

The control program/strategies in place

Systematic control and eradication of Bovine tuberculosis in Croatia started in 1946. Due to comprehensive measures, herd disease incidence was in the period 1946 - 1953 rapidly reduced, from 28% to less than 1.4% in 1953. In the next 10 years herd disease incidence decreased to less than 1% of infected herds, and during the period of 1965 - 1990 it was constantly at the level between 0.5 - 1%. From 2006 - 2009 all bovines older than 6 weeks have been subject of annual round tuberculin screening test in all herds. Eradication programme aligned with Directive 64/432/EEZ started in 2010th and in the end of 2015 99,9 % of bovine herds is OTF. Measures which are carried out under the programme for eradication of bovine tuberculosis: - annual routine tuberculin testing of all bovines from the age of 6 weeks in order to retain OTF herd status, - testing twice a year in area where common pasture is practised, before and after the pasture season - testing only with comparative intradermal test in one municipality in Sisak-moslavina county - slaughtering of positive reactors- bacteriological examination of samples from slaughtered animals and identification of the agent - animals have to have negative tuberculin skin test performed 12 months before movement - compensation for the owners of slaughtered animals - monitoring of wildlife in order to detect the presence of *Mycobacterium tuberculosis* complex. Positive reactors - animals not testing negative on the intradermal test in herds where *M. tuberculosis* was previously confirmed, animals positive on tuberculin skin test in the areas where bovine tuberculosis was previously confirmed, animals not testing negative on comparative skin test in cases where false positive reaction was suspected and animals were retested. Additional control measures - registration and approval of holdings, transporters, dealers and assembly centres - identification and registration of animals - movement of animals accompanied with health certificate of animal health and origin - veterinary inspection on the holdings - in wild game cutting and processing plants, in case of pathoanatomical changes indicative of tuberculosis, veterinary inspector or authorised veterinarian must collect the changed lymph nodes and the changed parenchymal organs (spleen, lungs, liver) and send them to the official laboratory to confirm or rule out tuberculosis, and must report the suspicion of the disease in accordance with special regulation - sampling of roe deer in one county (Bjelovar-bilogora county) in order to detect the presence of *Mycobacterium tuberculosis*

Recent actions taken to control the zoonoses

Official eradication programme is carried out since 2010 and bovines older than 6 weeks are regularly tested according to Directive 64/432.

Measures in case of the positive findings or single cases

In case of positive result, veterinary inspector should order measures as follows: 1) The herd is placed under official surveillance 2) Isolation of all positive animals within the herd 3) Prohibition of any movement into or out of the herd, unless authorised by the CA, for the purpose of slaughter without delay 4) Isolation, until the further testing or sending to slaughter 5) Milk from the infected cows may only be fed to animals on the same farm, after suitable heat treatment 6) Milk from cows from the infected herd (without prejudice to national provisions concerning foodstuffs) can not be delivered to a dairy, except to undergo suitable heat treatment 7) Carcasses, half-carcasses, quarters, pieces and offal from infected cattle intended for use as feed for animals are treated in such a way to avoid contamination 8) Slurry and manure storage and premises disinfection requirements and procedures are notified to the farmer 9) All positive animals must be slaughtered as soon as possible, but not later than 30 days after the owner was officially notified about the disease and his obligation 10) After the slaughter of all positive animals and prior to restocking, general cleaning and disinfection of all herd quarters, sheds and all equipment should be performed, under official supervision and in accordance with the instructions of the veterinary inspector 11) After the slaughter and disinfection, restoration of officially free status is carried out according to Directive 64/432/EEZ

Notification system in place

According to Croatian Ordinance on notification of animal diseases bovine tuberculosis is compulsory notifiable disease. The Ordinance sets out the obligation to notify the occurrence (confirmed case) of bovine tuberculosis and the obligation to notify any suspicion of bovine tuberculosis and lays down the procedures to be followed by the keeper of the animal, the authorised veterinarian, the veterinary inspector and official laboratories. The keeper of the animal must immediately and without delay notify an authorised veterinary organisation on suspicion of the disease (clinical signs). A veterinarian who suspects the disease or finds positive or inconclusive results of tuberculin test must notify the Veterinary and Food Safety Directorate and the veterinary inspector at a competent branch of the veterinary office by telephone and telefax or electronic means, without delay and not later than within 24 hours. The authorised veterinarian must submit information about the suspicion using the forms set out in Annex III to the Ordinance on the notification of animal diseases.

Results of the investigation

Testing in 2015: 28 221 herds tested (95 %) 305 734 animals tested (86%) Animals and herds positive on tuberculin skin test: 15 herds, 20 animals Confirmed tuberculosis (isolation of *Mycobacterium tuberculosis* complex): 6 herds, 11 animals (all cases *Mycobacterium caprae*) Animals with suspicious lesion during regular slaughter : 6 herds, 13 animals Program on roe deer (sampling in one county in order to detect the presence of *Mycobacterium tuberculosis* complex): Samples: lymph nodes retropharyngeal, tracheobronchial, gastric , portal and mesenteric, and also lungs and spleen. Total number of samples: 36 negative: 24 *Mycobacterium* sp.: 4 *Mycobacterium fortuitum* : 7 *Mycobacterium kansasii*: 1 *Mycobacterium tuberculosis* complex was not isolated.

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

Prevalence of bovine tuberculosis in Croatia is decreasing which can be demonstrated with numbers of confirmed bovine tuberculosis cases in the period 2010-2015: 2010 - 0,0587 % (24 herds) 2011 - 0,024 % (10 herds) 2012 - 0,0133 % (5 herds) 2013 - 0,0168 % (6 herds) 2014 - 0,0233 % (8 herds) 2015 - 0,0183 % (6 herds)

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

Since the prevalence of BTB is constantly decreasing and all bovine animals slaughtered are examined for lesions suspicious of tuberculosis, public health impact can be considered as low.

1.1.1.2 *Mycobacterium tuberculosis* complex (MTC) in animal - Cattle (bovine animals) - Farm

Status as officially free of bovine tuberculosis during the reporting year

The entire country free

Croatia is not recognised as country officially tuberculosis free according to Directive 64/432/EEC.

1.2 BRUCELLOSIS

1.2.1 *Brucella* in animals

1.2.1.1 B. abortus in animal - Cattle (bovine animals)

Status as officially free of bovine brucellosis during the reporting year

The entire country free

Croatia is not recognised as country officially brucellosis free according to Directive 64/432/EEC.

Free regions

Croatia has no regions officially brucellosis free according to Directive 64/432/EEC.

Additional information

Croatia is in process of designation of officially brucellosis free herds according to Directive 64/432/EEC and fulfilling the requirements of Annex A, part II, point 7. Last case of bovine brucellosis in Croatia (*B. abortus*) was confirmed in 1965. Measures of active control and early detecting of bovine brucellosis have been systematically implemented during the last two decades. Mandatory reporting and laboratory investigation of each abortion in cattle and pre-movement testing of bovine animals older than 12 months were constantly the part of the control measures. Testing scheme of control of the herds has changed several times, consisting of combination of bulk milk sampling and individual blood testing, especially in holdings with more than 10 dairy cows. In period 2007-2009, following measures were prescribed every year: a) Mandatory reporting of all abortions and laboratory investigation. b) Blood sampling of 20 % cows in all herds with more than 10 cattle. Also, blood samples of all heifers, before first lactation, had to be taken in such herds. c) Pre-movement testing for all breeding cattle older than 12 months. d) Blood sampling of all breeding bulls, twice per year. Since 2011th control measures fully aligned with Directive 64/432/EEC have started and it is the first year of the official eradication programme.

Monitoring system

Sampling strategy

In 2015th all breeding animals older than 12 months in the whole county are tested once in order to maintain officially brucellosis free (OBF) status. Also, it is mandatory to report each case of *abortus* in bovine animals which is further laboratory investigated.

Frequency of the sampling

All breeding animals older than 12 months - Rose Bengal Test, once a year. Each reported abortion case is further investigated. Pre-movement testing is not mandatory for movement between officially free herds.

Type of specimen taken

Blood and for isolation of *Brucella abortus* uterine discharges, aborted foetuses, udder secretions or selected tissues, such as lymph nodes and male and female reproductive organs, according to Annex C of Directive 64/432/EEC.

Methods of sampling (description of sampling techniques)

Sampling is performed according to Annex C of Directive 64/432/EEC.

Case definition

In case of positive Rose Bengal Test, additional serological tests are needed. Croatian Veterinary Institute Zagreb uses four tests in order to rule out false positive serological reactions. RBT performed in NRL, CFT, cELISA and iELISA. If in additional tests there are no positive results, or again only RBT is positive, final result is considered as negative. But if there are two or more positive tests at confirmation level, there are 3 options for further interpretation: a. In case of any clinical signs; in case that blood sample is taken as the result of abortion; in case that movement or testing history of the herd of the origin is not clear - animal is considered as positive and sent to slaughter and further bacteriological examination. b. In case that there are no clinical signs and if history of the herd is clear (movements, testing), herd will be under restriction and positive animals will be isolated. Additional blood sample should be taken or brucella skin test should be applied. If at second blood test done after 35-45 days there are two or more positive tests, animal is considered as a positive one and animal will be sent to slaughter. Also, if animal is positive on brucella skin test it will be sent to slaughter. In all positive cases, samples at slaughterline must be taken and sent to Croatian Veterinary Institute for further laboratory examination and isolation of *Brucella abortus*. According to the Ordinance on measures for control and eradication of bovine brucellosis (Official Gazette, 112/13), bovine brucellosis is considered to be confirmed if laboratory or molecular investigation confirms presence of *Brucella abortus* in animals slaughtered due to suspicion after serological or skin test or after a laboratory investigation of aborted material. In case of positive bulk milk sample, individual blood sample must be taken from all bovines whose milk was included into bulk sample. In 2015th, all animals positive on serological test were tested with brucella skin test. All animals were negative.

Diagnostic/analytical methods used

The Laboratory for Bacterial Zoonoses and Molecular Diagnostics of Bacterial Diseases of the Croatian Veterinary Institute in Zagreb is the official and national reference laboratory for the diagnosis of bovine brucellosis. In accordance to the Annex C of Directive 64/432/EEC, blood tests for bovine brucellosis are: a) Rose Bengal Test (RBT) as the screening method b) Complement Fixation Test (CFT) as confirmation method c) Competitive ELISA (cELISA) for confirmation purposes d) Indirect ELISA (iELISA) for confirmation purposes. Bulk milk samples are tested using the Milk ELISA Test. Brucella skin test: testing of positive serological reactors and some negative animals from the same herd (at least 3 negative animals on every positive animal) Confirmation: isolation of *Brucella abortus*.

Vaccination policy

Vaccination is prohibited.

Other preventive measures than vaccination in place

The guidelines of good manufacturing practice are stipulated by the Veterinary Act, the Food Act and the implementing secondary regulations. Continuous education of veterinarians, producers and animal holders is conducted through the Croatian Veterinary Chamber, the Croatian Chamber of Economy and the Advisory Services of the Ministry of Agriculture. Also, Animal Health Sector participates in education of farmers through stakeholders associations and is raising awareness about importance of reporting abortions.

Control program/mechanisms

The control program/strategies in place

In 2015th all breeding animals older than 12 months were tested once with RBT in order to maintain OBF status. All reported abortions of bovine animals are further investigated, and brucellosis has to be ruled out (bacteriological investigation of aborted samples and RBT on animals). On all animals positive on serological test (RBT and CFT and/or iELISA and/or cELISA) brucella skin test was performed. Testing was performed on positive animal and also on some serologically negative animals from the herd (at least 3 negative animals on each positive animal). All animals were negative on brucella skin test. In case animals would be positive on brucella skin test they would be slaughtered and sampled for bacteriological investigation (uterine discharges, aborted fetuses, udder secretions or selected tissues, such as lymph nodes and male and female reproductive organs). Additional control measures - registration and approval of holdings, transporters, dealers and assembly centres - identification and registration of animals - movement of animals accompanied with health certificate of animal health and origin - reporting abortion is mandatory and all abortions are further investigated - official veterinary inspection at the holdings. In case of any suspicion case in the herd, as well as in case of any positive blood test result, holding is immediately restricted by the decision of veterinary inspector and rules prescribed by the Ordinance on measures for control and eradication of bovine brucellosis are applied (OBF herd status is suspended or withdrawn, no cattle can leave the herd concerned, unless by the authorisation of veterinary inspector for the purpose of slaughter without delay and suspicion on brucellosis has to be confirmed or ruled out).

Recent actions taken to control the zoonoses

Official eradication programme including all breeding animals older than 12 months, aligned with Directive 462/64/EEZ, is in place since 2011.

Measures in case of the positive findings or single cases

In case where brucellosis is suspected or confirmed, the holding is restricted under EU and national legislation and animals can not be moved into or out of a restricted holding except in accordance with the movement permit approved by the CA. Measures in case of suspicion or officially confirmed bovine brucellosis are prescribed by the Ordinance on measures for control and eradication of bovine brucellosis, which is aligned with the criteria for accelerated eradication of bovine brucellosis, prescribed by the Directive 78/52/EEC.

Notification system in place

The Ordinance on the notification of animal diseases (Official Gazette 62/11, 114/11) sets out the obligation to notify the occurrence (confirmed case) of bovine brucellosis and the obligation to notify any suspicion of bovine brucellosis and lays down the procedures to be followed by the keeper of the animal, the authorised veterinarian, the veterinary inspector and official laboratories. The keeper of the animal must immediately and without delay notify an authorised veterinary organisation suspicion on disease (clinical signs). A veterinarian who suspects the disease must notify the Veterinary and Food Safety Directorate and the state veterinary inspector at a competent branch of the veterinary office thereof by telephone and telefax or by electronic means, without delay and not later than within 24 hours. The authorised veterinarian must submit information about the suspicion using the forms set out in Annex III to the Ordinance on the notification of animal diseases.

Results of the investigation

Testing results in 2015 Eligible herds: 27895 Tested herds: 27 603 (98 %) Eligible animals: 227 366 Tested animals : 219 905 (96%) Serologically positive animals (positive on RBT and CFT and/or iELISA and/or cELISA): 23 animals in 19 herds. All positive animals were tested with brucella skin test: total number of tested animals (positive and also some negative animals from the herd) 117, all were negative.

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

Bovine brucellosis was not confirmed in Croatia since 1965. Official eradication programme in line with the Directive 64/432 started in 2011.

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

Since the last case of Bovine brucellosis in Croatia was confirmed in 1965 public health impact can be considered as negligible.

1.2.1.2 B. melitensis in animal - Goats

Status as officially free of caprine brucellosis during the reporting year

The entire country free

Croatia is not recognised as country officially free from sheep and goat brucellosis according to Directive 91/68/EEC.

Free regions

Croatia has no regions officially free from sheep and goat brucellosis according to Directive 91/68/EEC.

Additional information

Designation of officially brucellosis free herds fully aligned with Directive 91/68/EEC started in 2012. Individual blood test were performed in all caprine and ovine flocks from which milk and milk products are placed on the market for public consumption (about 12% of all sheep and goat population in the country). From 2014 programme on the whole sheep and goat population started and at the end of 2015 - 63% of flocks are officially free. Last case of sheep and goat brucellosis was in 2013 in one flock which was depopulated.

Monitoring system

Sampling strategy

The Programme in 2015 covered all caprine animals over six months in flocks not yet officially free, and the representative number of animals in officially free (OF) flocks. Animals were tested with RBT. All animals positive on RBT were tested with CFT. In case more than 5 % of animals from the herd were positive on RBT, all samples have to be tested with CFT.

Frequency of the sampling

Sampling is performed once a year on all animals older than 6 months. Additional testing is performed also in case of abortion.

Type of specimen taken

Testing for OF status: blood (RBT as screening method; CFT as confirmation of suspicion). Testing in case of abortion: blood, - RBT, aborted material - bacteriology/PCR Serologically positive animals (CFT): animals are culled and sampled for bacteriology: uterus, testicles, spleen, fetus, lymph nodes: supramammary, inguinal, portal, mandibular and mesenteric.

Methods of sampling (description of sampling techniques)

Individual blood samples are taken by authorised veterinary organisations. Also, samples for bacteriology have to be taken and sent to laboratory for further bacteriological examination and identification of the bacteria in case of CFT positive animals.

Case definition

Suspicion on brucellosis: animal positive on CFT. Confirmed case: isolation and identification of *Brucella melitensis*.

Diagnostic/analytical methods used

Serological methods: Rose Bengal test and Complement fixation test Bacteriological examination - culture and identification of the agent

Vaccination policy

Vaccination is not performed.

Control program/mechanisms

The control program/strategies in place

The eradication Programme for Ovine and Caprine Brucellosis (*B. melitensis*) is in line with Directive 91/68. Animals positive on CFT are culled and sampled for bacteriology. It is mandatory to report abortions, which are further investigated in order to rule out brucellosis. Goal of the control and eradication programme is to certify flock as officially free from sheep and goat brucellosis. Flocks in which all animals older than 6 months, at the time of testing, have reacted negatively to two serological tests separated by an interval of six months or more, are considered officially free. Premovement testing between officially free herds is not mandatory. Maintenance of status in OF flocks : testing of representative number of animals in line with Directive 91/68.

Recent actions taken to control the zoonoses

Official programme aligned with Directive 91/68/EEZ, is in place since 2012 (for dairy and mixed herds) and from 2014 for whole sheep and goat population. Programme will continue until the whole country will be recognized as officially free.

Measures in case of the positive findings or single cases

Measures taken when the disease is suspected: 1) If one or more animals in the flock reacts positive on CFT, animals have to be isolated before killing which has to be performed immediately and not later than 7 days from the time of suspicion. Carcass is sampled for bacteriological investigation which is performed in Croatian Veterinary Institute. 2) OF status is suspended, until bacteriological investigation finishes with negative result. 3) During the suspicion, holding has to be placed under official supervision and animal census has to be made. 4) All animals older than 6 months, if not tested in the last 30 days, have to be tested and also all other susceptible species. 5) No animals of susceptible species can enter or leave the holding, except to slaughter (serologically negative animals and animals younger than 6 months) under supervision of vet. inspector 6) no artificial/natural insemination or animals suspicious to brucellosis 7) manure and slurry can't leave the holding 8) limitation for placing the milk from the holding: milk from suspicious animals has to be kept separately and can not be used for human consumption, milk from animals on the suspicious holding which have reacted negatively can be placed on the market only if it is properly heat treated or if it is used for cheese production with maturation period of at least 2 months or as feed for animals 9) all dead animals and aborted material has to be safely destroyed. In case of confirmation of infection (isolation of *Brucella melitensis*): All the measures in case of suspicion and following measures: 1) the infected building and yard, as well as objects which have come into contact with the infected animal, must be disinfected, before being used again 2) bedding, straw, litter and upper layers of soil used by the infected animal have to be disinfected and safely disposed 3) manure and slurry - stored in a place inaccessible to farm animals, treated with a suitable and approved disinfectant and stored for at least three weeks. Use of disinfectant is not required if the manure is completely covered. Liquid manure (slurry) must be disinfected. The manure must not be used for fertilizing of vegetables which will be placed on the market. 4) an epidemiological investigation must be conducted to collect at least the following information: the number of animals in the herd, animal movements from/to the holding in the last 12 months, the time of appearance of the first signs of the disease; likely sources of infection on the infected holding; a list of other holdings containing animals that may have been infected from the same source 5) Pastures grazed by infected animals may not be re-used for 60 days after the last infected animal left such pastures. 6) After the killing and safe disposal of animals and prior to introducing new animals into the herd, sheds and other quarters where the animals were kept, as well as the milking equipment, tools for cleaning sheds and yards, containers and other equipment used in animal management must be washed and disinfected under official supervision and in accordance with the recommendations given by the veterinary inspector. 6) restoration of OF status - aligned with the Directive 91/68 (all remaining animals react negatively to two tests, separated by an interval of at least three months or more).

Notification system in place

The Ordinance on the notification of animal diseases (Official Gazette 62/11, 114/11) sets out the obligation to notify the occurrence (confirmed case) of ovine and caprine brucellosis and the obligation to notify any suspicion of ovine and caprine brucellosis and lays down the procedures to be followed by the keeper of the animal, the authorised veterinarian, the veterinary inspector and official laboratories. The keeper of the animal must immediately and without delay notify to authorised veterinary organisation suspicion on disease (clinical signs). A veterinarian who suspects the disease or detects a primary or secondary outbreak of the disease must notify the Veterinary Directorate and the veterinary inspector at a competent branch of the veterinary office thereof by telephone and telefax or electronic means, without delay and not later than within 24 hours. The authorised veterinarian must submit information about the suspicion or confirmed case of ovine and caprine brucellosis using the forms set out in Annex III to the Ordinance on the notification of animal diseases.

Results of the investigation

Last outbreak of sheep and goat brucellosis in Croatia was in 2013. The flock was depopulated. There was no new outbreaks. Results for 2015: Officially free flocks (December 31st 2015): 14 371 flocks (63 %) 489 880 animals (69 %) Total number of flocks: 22 767 Flocks in the programme: 21 715 Tested flocks: 19 053 (87%) Total number of animals: 705 190 Animals in the programme: 598 194 Tested animals: 541 225 (90%) Serologically positive flocks: CFT positive flocks: 28 (0.147%) CFT positive animals: 44 (0.008) Confirmed infection (isolation of *B. melitensis*): 0 Abortions: 192 reported abortions, 61 samples bacteriologically investigated. All samples were negative.

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

Ovine and caprine brucellosis (*B. melitensis*) in ovine and caprine herds in Croatia occurs sporadically and current epidemiological situation is very good. Confirmed outbreaks (sheep and goat flocks) 2008 -2015 2008 - 14; 2009 - 8; 2010 - 8; 2011 - 0; 2012 - 0; 2013 - 1; 2014 - 0; 2015 - 0.

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

In the last few years, since official eradication programmes started, relevance of brucellosis in caprine and ovine animals, as a possible source of infection for humans is decreasing. Number of reported human cases decreased in the period 2008-2014. Human cases 2008-2014: 2008 - 25; 2009 - 3; 2010 - 3; 2011 - 2; 2012 - 0; 2013 - 1; 2014 - 0.

1.2.1.3 *B. melitensis* in animal - Sheep

Status as officially free of ovine brucellosis during the reporting year

The entire country free

Croatia is not recognised as country officially brucellosis free according to Directive 91/68/EEC.

Free regions

Croatia has no regions officially brucellosis free according to Directive 91/68/EEC.

Additional information

Designation of officially brucellosis free flocks aligned with Directive 91/68/EEC started in 2012 on dairy and mixed herds and continued on the whole sheep population from 2014. At the end of 2015 - 63% of flocks are officially free. Last case of sheep and goat brucellosis was in 2013 in one flock (sheep) which was depopulated.

Monitoring system

Sampling strategy

The Programme in 2015 covered all caprine animals over six months in flocks not yet officially free, and the representative number of animals in OF flocks. Animals were tested with RBT. All animals positive on RBT were tested with CFT. In case more than 5 % of animals from the herd were positive on RBT, all samples were retested with CFT.

Frequency of the sampling

Sampling is performed once a year on all animals older than 6 months (flocks not yet officially free all animals older than 6 months, in officially free flocks representative number of animals is tested). Additional testing is performed also in case of abortion.

Type of specimen taken

Testing for OF status: blood (RBT as screening method; CFT as confirmation of suspicion). Testing in case of abortion: blood, RBT, aborted material - bacteriology/PCR Serologically positive animals (CFT) are culled and sampled for bacteriology: uterus, testicles, spleen, fetus, lymph nodes: supramammary, inguinal, portal, mandibular and mesenteric.

Methods of sampling (description of sampling techniques)

Individual blood samples are taken by authorised veterinary organisations. Also, samples for bacteriology have to be taken and sent to laboratory for further bacteriological examination and identification of the bacteria from CFT positive animals which are culled.

Case definition

Suspicion on brucellosis: animal positive on CFT Confirmed case: isolation and identification of *Brucella melitensis*.

Diagnostic/analytical methods used

Serological methods: Rose Bengal test for screening and Complement fixation test for confirmation of suspicion. Bacteriological examination, culture and identification of the agent for confirmation of infection.

Vaccination policy

Vaccination is not performed.

Control program/mechanisms

The control program/strategies in place

The Eradication Programme for Ovine and Caprine Brucellosis (*B. melitensis*) is in line with Directive 91/68. Animals positive on CFT are culled and sampled for bacteriology. It is mandatory to report abortions, which are further investigated in order to rule out brucellosis. Goal of the control and eradication programme is to certify flock as officially free. Flocks in which all animals older than 6 months, at the time of testing, have reacted negatively to two serological tests separated by an interval of six months or more, are considered officially free. Premovement testing between officially free herds is not mandatory. Maintenance of status in OF flocks: testing of representative number of animals, once a year, in line with Directive 91/68.

Recent actions taken to control the zoonoses

Official programme aligned with Directive 91/68/EEZ is in place since 2012 (for dairy and mixed herds) and from 2014 for whole sheep population. Programme will continue until the whole country will be recognized as officially free.

Measures in case of the positive findings or single cases

Measures taken when the disease is suspected: 1) If one or more animals in the flock reacts positive on CFT, animals have to be isolated before killing which has to be performed immediately and not later than 7 days from the time of suspicion. Carcass is sampled for bacteriological investigation which is performed in Croatian Veterinary Institute. 2) OF status is suspended, until bacteriological investigation finishes with negative result. 3) During the suspicion, holding has to be placed under official supervision and animal census has to be made. 4) All animals older than 6 months, if not tested in the last 30 days, have to be tested and also all other susceptible species. 5) No animals of susceptible species can enter or leave the holding, except to slaughter (serologically negative animals and animals younger than 6 months) under supervision of vet. inspector 6) no artificial/natural insemination or animals suspicious to brucellosis 7) manure and slurry can't leave the holding 8) limitation for placing the milk from the holding: milk from suspicious animals has to be kept separately and can not be used for human consumption, milk from animals on the suspicious holding which have reacted negatively can be placed on the market only if it is properly heat treated or if it is used for cheese production with maturation period of at least 2 months or as feed for animals 9) all dead animals and aborted material has to be safely destroyed. In case of confirmation of infection (isolation of *Brucella melitensis*): All the measures in case of suspicion and following measures: 1) the infected building and yard, as well as objects which have come into contact with the infected animal, must be disinfected, before being used again 2) bedding, straw, litter and upper layers of soil used by the infected animal have to be disinfected and safely disposed 3) manure and slurry - stored in a place inaccessible to farm animals, treated with a suitable and approved disinfectant and stored for at least three weeks. Use of disinfectant is not required if the manure is completely covered. Liquid manure (slurry) must be disinfected. The manure must not be used for fertilizing of vegetables which will be placed on the market. 4) an epidemiological investigation must be conducted to collect at least the following information: the number of animals in the herd, animal movements from/to the holding in the last 12 months, the time of appearance of the first signs of the disease; likely sources of infection on the infected holding; a list of other holdings containing animals that may have been infected from the same source 5) Pastures grazed by infected animals may not be re-used for 60 days after the last infected animal left such pastures. 6) After the killing and safe disposal of animals and prior to introducing new animals into the herd, sheds and other quarters where the animals were kept, as well as the milking equipment, tools for cleaning sheds and yards, containers and other equipment used in animal management must be washed and disinfected under official supervision and in accordance with the recommendations given by the veterinary inspector. 6) restoration of OF status - aligned with the Directive 91/68 (all remaining animals react negatively to two tests, separated by an interval of at least three months or more).

Notification system in place

The Ordinance on the notification of animal diseases (Official Gazette 62/11, 114/11) sets out the obligation to notify the occurrence (confirmed case) of ovine and caprine brucellosis and the obligation to notify any suspicion of ovine and caprine brucellosis and lays down the procedures to be followed by the keeper of the animal, the authorised veterinarian, the state veterinary inspector and official laboratories. The keeper of the animal must immediately and without delay notify an authorised veterinary organisation suspicion on disease (clinical signs and dead animals). A veterinarian who suspects the disease or detects a primary or secondary outbreak of the disease must notify the Veterinary Directorate and the state veterinary inspector at a competent branch of the veterinary office thereof by telephone and telefax or electronic means, without delay and no later than within 24 hours. The authorised veterinarian must submit information about the suspicion or confirmed case of ovine and caprine brucellosis using the forms set out in Annex III to the Ordinance on the notification of animal diseases.

Results of the investigation

Last outbreak of sheep and goat brucellosis was in 2013. The flock was depopulated. There was no new outbreaks. Results for 2015: Officially free flocks (December 31st 2015): 14 371 flocks (63 %) 489 880 animals (69 %) Total number of flocks: 22 767 Flocks in the programme: 21 715 Tested flocks: 19 053 (87%) Total number of animals: 705 190 Animals in the programme: 598 194 Tested animals: 541 225 (90%) Serologically positive flocks: CFT positive flocks: 28 (0.147%) CFT positive animals: 44 (0.008) Confirmed infection (isolation of *B. melitensis*) : 0 Abortions: 192 reported abortions, 61 samples bacteriologically investigated. All samples were negative.

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

Ovine and caprine brucellosis (*B. melitensis*) in ovine and caprine herds in Croatia occurs sporadically and current epidemiological situation is very good. Confirmed outbreaks (sheep and goat flocks) 2008 -2015 2008 - 14; 2009 - 8; 2010 - 8; 2011 - 0; 2012 - 0; 2013 - 1; 2014 - 0; 2015 - 0.

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

In the last few years, since official eradication programmes started, relevance of brucellosis in caprine and ovine animals, as a possible source of infection for humans is decreasing. Number of reported human cases decreased in the period 2008-2015. Human cases 2008-2014: 2008 - 25; 2009 - 3; 2010 - 3; 2011 - 2; 2012 - 0; 2013 - 1; 2014 - 0.

2 INFORMATION ON SPECIFIC ZONOSSES AND ZONOTIC AGENTS

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

2.1 LISTERIOSIS

2.1.1 Listeria in animals

2.1.1.1 Listeria in animal

Monitoring system

Sampling strategy

Passive surveillance

Type of specimen taken

In cases of abortion in cows, ewes and goats, the aborted foetus of such animals must be sent for laboratory examination for listeriosis. Brain of sheep, goats and cattle which are showing clinical signs of disturbances in the central nervous system and behavioural disorders must be examined for listeriosis.

Methods of sampling (description of sampling techniques)

Brain tissue, foetus (abortion), vaginal swab, milk and faeces

Diagnostic/analytical methods used

The disease is confirmed on the basis of clinical signs and bacteriological method.

Vaccination policy

Bacteriological method.

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

Listeriosis is on the list of notifiable diseases in Croatia, according to the Ordinance of the methods for monitoring, notification and reporting of animal diseases (Official Gazette No. 135/2014).

2.2 TRICHINELLOSIS

2.2.1 Trichinella in animals

2.2.1.1 Trichinella in animal - Solipeds, domestic - horses

Monitoring system

Sampling strategy

Carcases of horses shall be systematically sampled in slaughterhouses as part of mandatory post-mortem inspection at slaughter, for the purpose of obtaining a suitable sample search. The sample must be taken from each carcass and examined for *Trichinella* in a laboratory designated by the competent authority.

Frequency of the sampling

Meat of each horses slaughtered in a slaughterhouse , obligatory to inspect for the presence of *Trichinella*.

Type of specimen taken

Lingual or jaw muscle.

Methods of sampling (description of sampling techniques)

Specimens weighing at least 10 g are taken from the lingual or jaw muscle.

Case definition

Suffering from *Trichinella* considered horses if the examination of the meat of the slaughtered animals determined the cause of *Trichinella spiralis*.

Diagnostic/analytical methods used

The methods of detection horses meat infested of *Trichinella* is done in accordance with COMMISSION REGULATION (EC) No 2075/2005 and No 216/2014.

Control program/mechanisms

The control program/strategies in place

Yes

Measures in case of the positive findings or single cases

If confirmed case of *Trichinella*, measures are being taken in accordance with the Veterinary act (Official Gazette 81/1999 and the Ordinance on measures for the control and eradication of trichinosis (Official Gazette 81/1999).

Notification system in place

Yes

Results of the investigation including the origin of the positive animals

Not applicable

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

Horse meat is not a public health problem.

2.2.1.2 Trichinella in animal - Pigs

Number of officially recognised Trichinella-free holdings

Not applicable

Categories of holdings officially recognised Trichinella-free

Not applicable

Officially recognised regions with negligible Trichinella risk

Not applicable

Monitoring system

Sampling strategy

General

Carcases of domestic swine shall be systematically sampled in slaughterhouses as part of mandatory post-mortem inspection at slaughter as well as for personal use, for the purpose of obtaining a suitable sample search. The sample must be taken from each carcass and examined for Trichinella, in a laboratory designated by the competent authority.

For Trichinella free holdings

Not applicable

For categories of holdings officially recognised Trichinella-free

Not applicable

For regions with negligible Trichinella risk

Not applicable

Frequency of the sampling

General

Carcases of domestic swine are systematically sampled in slaughterhouses as part of the post-mortem examination and of pig meat for the presence of nematodes of the genus Trichinella at the time of slaughter for private domestic consumption.

Type of specimen taken

General

Pillar of the diaphragm

For Trichinella free holdings

Not applicable

For categories of holdings officially recognised Trichinella-free

Not applicable

For regions with negligible Trichinella risk

Not applicable

Methods of sampling (description of sampling techniques)

General

In the case of whole carcasses of domestic swine, a specimen weighing at least 1 g is to be taken from a pillar of the diaphragm at the transition to the sinewy part. In the case of breeding sows and boars, a larger sample weighing at least 2 g is to be taken from a pillar of the diaphragm at the transition to the sinewy part. In the absence of diaphragm pillars, a specimen of twice the size 2 g (or 4 g in the case of breeding sows and boars) is to be taken from the rib part or the breastbone part of the diaphragm, or from the raw muscle, tongue or abdominal muscles. For cuts of meat, a sample weighing at least 5 g of striated muscle, containing little fat is to be taken, where possible from close to bones or tendons. A sample of the same size is to be collected from meat that is not intended to be cooked thoroughly or other types of post-slaughter processing. For frozen samples, a sample weighing at least 5 g of striated muscle tissue is to be taken for analysis. The weight of meat specimens relates to a sample of meat that is free of all fat and fascia.

Case definition

General

Suffering from Trichinella considered pigs in which the life of serological examinations of blood or other examination which determines disease or if the examination of the meat of the slaughtered animals determined the cause of Trichinella spiralis.

Diagnostic/analytical methods used

General

The methods of detection pig meat infested of Trichinella is done in accordance with COMMISSION REGULATION (EC) No 2075/2005 and No 216/2014.

Preventive measures in place

Yes

Control program/mechanisms

The control program/strategies in place

Yes

Summary results of the inspections of Trichinella-free holdings including information on farmer compliance

Not applicable

Measures in case of the positive findings or single cases

If confirmed case of Trichinella measures are being taken in accordance with the Veterinary act (Official Gazette 81/1999 and the Ordinance on measures for the control and eradication of trichinosis (Official Gazette 81/1999).

The contingency plan in place

Yes

Notification system in place

Yes

Results of the investigation including description of the positive cases and the verification of the Trichinella species

Fattening pigs raised under controlled housing conditions in integrated production system

Not applicable

Fattening pigs not raised under controlled housing conditions in integrated production system

Not applicable

Breeding sows and boars

Not applicable

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

Continuous measurement of mandatory meat pigs reduced the number of confirmed cases of Trichinella, and Trichinella is not a public health problem in Croatia.

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

Not applicable

2.3 RABIES

2.3.1 Lyssavirus (rabies) in animals

2.3.1.1 Lyssavirus (rabies) in animal - Dogs

Control program/mechanisms

The control program/strategies in place

All dogs (older than 3 months) have to be identified with microchip and vaccinated once per year only with monovalent vaccine prepared from inactivated, highly immunogenic rabies virus.

Suggestions to the European Union for the actions to be taken

All dogs older than three months must be vaccinated against rabies in the entire territory of the Republic of Croatia. Dogs must be marked with microchip.

Measures in case of the positive findings or single cases

Oral vaccination of foxes.

Results of the investigation including the origin of the positive animals

Clinically healthy dogs which have wounded people have to be put under official control over the period of 10 days (three clinical examination: first, fifth and tenth day). If suspicion is confirmed- euthanasia and laboratory testing. If it is not confirmed- six month quarantine if animal is vaccinated.

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

Rabies is notifiable disease in Croatia.

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

Routine laboratory testing- according to the OIE recommendations (direct FAT and PCR).

Additional information

Indication for use of immunoprophylaxis (vaccination and immunoglobulin) is determined by a physician.

2.4 Q-FEVER

2.4.1 General evaluation of the national situation

2.4.1.1 Coxiella (Q-fever) - general evaluation

History of the disease and/or infection in the country

Q- fever sporadically occurred among domestic animals in certain regions of the Republic of Croatia.

Suggestions to the European Union for the actions to be taken

For detection of Q-fever, all abortions of cows, sheep and goats must be notified to a veterinarian. The authorised veterinarian shall take samples from the aborting animal and shall submit them to the official laboratory to be tested for Q-fever.

Additional information

Elimination of the sources of the infection, isolation of affected animals, raising biosecurity measures.

3 FOODBORNE OUTBREAKS

Foodborne outbreaks are incidences of two or more human cases of the same disease or infection where the cases are linked or are probably linked to the same food source. Situation, in which the observed human cases exceed the expected number of cases and where a same food source is suspected, is also indicative of a foodborne outbreak.

3.1 Outbreaks

3.1.1 Foodborne outbreaks

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

The reporting of foodborne outbreaks in Croatia is regulated by a number of laws and ordinances (Act on the Protection of the Population against Communicable Diseases (OG 79/2007; 113/2008; 44/2009), List of Communicable Diseases the control and prevention of which is of interest to Croatia (OG 60/2014), Ordinance on the method of reporting communicable diseases (OG 23/94). Pursuant to the above-mentioned regulations each foodborne outbreak is mandatorily notified to the Epidemiology Service of the Croatian Institute of Public Health (CIPH) immediately when the outbreak occurs and is identified. Epidemiology Service of the Croatian Institute of Public Health receives the paper report about an outbreak with all the necessary information after the completion of the outbreak investigation. The outbreaks are investigated by the field epidemiology team that has a microbiological support from the county public health laboratories (21). They also notify and cooperate with the sanitary inspectors and this approach enables also environmental analysis (inspection of food facilities), taking samples for laboratory investigation.

ANIMAL POPULATION TABLES

Table Susceptible animal population

Animal species	Category of animals	Population		
		holding	animal	herd/flock
Cats	Cats		1,512	
Cattle (bovine animals)	Cattle (bovine animals)	30,312	426,786	
Deer	Deer - wild - fallow deer		1,703	
	Deer - wild - red deer		16,453	
Dogs	Dogs		354,508	
Gallus gallus (fowl)	Gallus gallus (fowl)		43,044,419	3,826
Goats	Goats	5,476	75,414	
Pigs	Pigs	98,947	1,458,068	
Sheep	Sheep	19,497	631,405	
Solipeds, domestic	Solipeds, domestic	5,086	23,951	
Turkeys	Turkeys		1,065,966	243
Wild boars	Wild boars		55,000	

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
Hrvatska (NUTS level 1)	431,696	227,366	219,905	219,905	23	1	1

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

Region	Number of new positive herds	Total number of herds	Number of herds under the program	Number of herds under the program tested/chec ked	Number of positive herds
Hrvatska (NUTS level 1)	19	32,753	27,895	27,603	19

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 officially free, at the end of the period	Number of animals with status officially free, at the end of the period
Hrvatska (NUTS level 1)	27,895	227,366	32,693	431,559

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
CROATIA	705,190	598,194	541,225	541,225	44

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

Region	Number of new positive herds	Number of depopulate d herds	Total number of herds	Number of herds under the program	Number of herds under the program tested/che cked	Number of positive herds
CROATIA	28	0	22,767	21,715	19,053	28

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 officially free, at the end of the period	Number of animals with status officially free, at the end of the period
CROATIA	21,705	598,194	14,371	489,880

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
CROATIA	431,696	353,734	305,734	305,734	32

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
CROATIA	14	1	32,753	29,586	28,221	21

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 officially free, at the end of the period	Number of animals with status officially free, at the end of the period
CROATIA	29,586	353,374	32,725	431,332

PREVALENCE TABLES

Table BRUCELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Pigs - Farm - Not Available - Not Available - Monitoring - Official sampling - Not specified	animal	32	1	Brucella suis	1

Table CAMPYLOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from broilers (Gallus gallus) - carcase - chilled - Slaughterhouse - Not Available - Not Available - Survey - national survey - Official sampling - Census	slaughte r animal batch		Not Available	974	489	Campylobacter coli	214
							Campylobacter jejuni	275

Table COXIELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	N of clinical affected herds	Zoonoses	N of units positive
Hrvatska (NUTS level 1)	Cattle (bovine animals) - Farm - Croatia - animal sample - Monitoring - Official sampling - Census	herd/flock	521	18	16	Coxiella burnetii	18
	Goats - Farm - Croatia - animal sample - Monitoring - Official sampling - Census	herd/flock	26	19	8	Coxiella burnetii	19
	Sheep - Farm - Croatia - animal sample - Monitoring - Official sampling - Census	herd/flock	80	3	1	Coxiella burnetii	3

Table ECHINOCOCCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Hrvatska (NUTS level 1)	Foxes - wild - Hunting - Croatia - animal sample - faeces - Monitoring - Official sampling - Census	animal	150	5	Echinococcus multilocularis	5
Zagrebačka županija (NUTS 2006)	Pigs - Slaughterhouse - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	1	1	Echinococcus granulosus complex	1

Table ESCHERICHIA COLI, NON-PATHOGENIC in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from bovine animals and pig - meat preparation - intended to be eaten cooked - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	10	Gram	201	8	Escherichia coli, non-pathogenic, unspecified	8

Table FLAVIVIRUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Hrvatska (NUTS level 1)	Birds - wild - Farm - Croatia - animal sample - blood - Monitoring - active - Official sampling - Census	animal	30	0	West Nile virus	0
	Gallus gallus (fowl) - Farm - Croatia - animal sample - blood - Monitoring - active - Official sampling - Census	animal	101	3	West Nile virus	3
	Solipeds, domestic - horses - Farm - Croatia - animal sample - blood - Monitoring - active - Official sampling - Census	animal	3064	218	West Nile virus	218
	Solipeds, domestic - horses - Farm - Croatia - animal sample - blood - Monitoring - active - Official sampling - Census	animal	218	10	West Nile virus	10

Table HISTAMINE in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Border inspection activities - Thailand - food sample - Monitoring - active - Official sampling - Objective sampling	batch (food/feed)	5	Gram	18	0	<= 100	Histamine	18	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Border inspection activities - Vietnam - food sample - Monitoring - active - Official sampling - Objective sampling	batch (food/feed)	5	Gram	9	0	<= 100	Histamine	9	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Processing plant - Croatia - food sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	5	Gram	81	0	<= 100	Histamine	81	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
		single (food/feed)	5	Gram	12	0	<= 100	Histamine	12	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Processing plant - Germany - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	5	Gram	1	0	<= 100	Histamine	1	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Processing plant - Spain - food sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	5	Gram	9	0	<= 100	Histamine	9	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
		single (food/feed)	5	Gram	7	0	<= 100	Histamine	7	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Retail - Croatia - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	5	Gram	15	0	<= 100	Histamine	15	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Retail - Norway - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	5	Gram	1	0	<= 100	Histamine	1	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Retail - Portugal - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	5	Gram	1	0	<= 100	Histamine	1	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Retail - Spain - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	5	Gram	5	0	<= 100	Histamine	5	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured - Retail - Turkey - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	5	Gram	1	0	<= 100	Histamine	1	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products which have undergone enzyme maturation treatment in brine - Border inspection activities - Albania - food sample - Monitoring - active - Official sampling - Objective sampling	batch (food/feed)	5	Gram	9	0	<= 100	Histamine	9	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products which have undergone enzyme maturation treatment in brine - Border inspection activities - Bosnia and Herzegovina - food sample - Monitoring - active - Official sampling - Objective sampling	batch (food/feed)	5	Gram	18	0	<= 100	Histamine	18	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
	Fish - Fishery products which have undergone enzyme maturation treatment in brine - Processing plant - Croatia - food sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	5	Gram	63	0	<= 100	Histamine	63	0
							>100 TO <= 200	Histamine	0	0
							<=200	Histamine	0	0
		single (food/feed)	5	Gram	7	0	<= 100	Histamine	6	0
							>100 TO <= 200	Histamine	1	0
							<=200	Histamine	0	0
	Fishery products, unspecified - ready-to-eat - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	batch (food/feed)	150	Gram	31	0	Not Available	Histamine	0	0

Table LISTERIA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Farm - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	313	27	Listeria monocytogenes	27
	Goats - Farm - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	23	1	Listeria monocytogenes	1
	Sheep - Farm - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Suspect sampling	animal	71	8	Listeria monocytogenes	8

Table LISTERIA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Bakery products - cakes - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed d)	10	Gram	275	0	<= 100	Listeria monocytogenes	275	0
							>100	Listeria monocytogenes	275	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed d)	25	Gram	35	0	Not Available	Listeria monocytogenes	35	0
	Cheeses made from cows' milk - hard - made from pasteurised milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Gram	12	1	Not Available	Listeria monocytogenes	12	1
		single (food/feed d)	25	Gram	5	0	Not Available	Listeria monocytogenes	5	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Border inspection activities - Not Available - Not Available - Survey - national survey - Official sampling - Selective sampling	batch (food/feed d)	25	Gram	4	0	Not Available	Listeria monocytogenes	4	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Gram	29	5	Not Available	Listeria monocytogenes	29	5
		single (food/feed d)	25	Gram	8	0	Not Available	Listeria monocytogenes	8	0
	Dairy products (excluding cheeses) - cream - made from raw or low heat-treated milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Gram	6	0	Not Available	Listeria monocytogenes	6	0
	Dairy products (excluding cheeses) - fermented dairy products - fermented cream - Border inspection activities - Not Available - Not Available - Survey - national survey - Official sampling - Selective sampling	batch (food/feed d)	25	Gram	4	0	Not Available	Listeria monocytogenes	4	0
	Dairy products (excluding cheeses) - ice-cream - made from pasteurised milk - Border inspection activities - Not Available - Not Available - Survey - national survey - Official sampling - Selective sampling	batch (food/feed d)	25	Gram	2	0	Not Available	Listeria monocytogenes	2	0
	Fish - raw - chilled - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed d)	25	Gram	11	0	Not Available	Listeria monocytogenes	11	0
	Fish - smoked - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	batch (food/feed d)	10	Gram	20	0	<= 100	Listeria monocytogenes	20	0
							>100	Listeria monocytogenes	20	0
	Fishery products, unspecified - ready-to-eat - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Gram	10	3	Not Available	Listeria monocytogenes	10	3
		single (food/feed d)	25	Gram	11	0	Not Available	Listeria monocytogenes	11	0
	Meat, mixed meat - meat products - meat specialties - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Gram	17	1	Not Available	Listeria monocytogenes	17	1
		single (food/feed d)	25	Gram	9	0	Not Available	Listeria monocytogenes	9	0
	Milk, cows' - raw milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Millilitre	10	1	Not Available	Listeria monocytogenes	10	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Milk, cows' - raw milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed)	25	Millilitre	8	0	Not Available	Listeria monocytogenes	8	0
		single (food/feed)	10	Gram	279	0	<= 100	Listeria monocytogenes	279	0
	>100						Listeria monocytogenes	279	0	
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	10	Gram	333	0	<= 100	Listeria monocytogenes	333	0
							>100	Listeria monocytogenes	333	0

Table LYSSAVIRUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
CROATIA	Badgers - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	8	0	Lyssavirus	0
	Bears - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	4	0	Lyssavirus	0
	Cats - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	260	0	Lyssavirus	0
	Cattle (bovine animals) - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	14	0	Lyssavirus	0
	Deer - wild - red deer - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	17	0	Lyssavirus	0
	Deer - wild - roe deer - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	62	0	Lyssavirus	0
	Dogs - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	197	0	Lyssavirus	0
	Foxes - Unspecified - Croatia - animal sample - brain - Monitoring - Official sampling - Census	animal	6144	0	Lyssavirus	0
	Foxes - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	441	0	Lyssavirus	0
	Gallus gallus (fowl) - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	1	0	Lyssavirus	0
	Goats - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	5	0	Lyssavirus	0
	Jackals - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	19	0	Lyssavirus	0
	Marten - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	53	0	Lyssavirus	0
	Rats - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	7	0	Lyssavirus	0
	Sheep - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	21	0	Lyssavirus	0
	Solipeds, domestic - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	2	0	Lyssavirus	0
	Turkeys - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	1	0	Lyssavirus	0
	Wild animals - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	15	0	Lyssavirus	0
	Wild boars - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	63	0	Lyssavirus	0
	Wolves - Unspecified - Croatia - animal sample - brain - Surveillance - Official sampling - Suspect sampling	animal	5	0	Lyssavirus	0

Table SALMONELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fowl) - breeding flocks, unspecified - adult - Farm - Croatia - environmental sample - Control and eradication programmes - Official and industry sampling - Census	herd/flock	178	Y	178	3	Salmonella Gloucester	1
							Salmonella Mbandaka	2
	Gallus gallus (fowl) - broilers - before slaughter - Farm - Croatia - environmental sample - Control and eradication programmes - Official and industry sampling - Census	herd/flock	3261	Y	3261	179	Salmonella Albany	3
							Salmonella Chester	3
							Salmonella Coeln	2
							Salmonella Duisburg	4
							Salmonella Enteritidis	12
							Salmonella Infantis	91
							Salmonella Mbandaka	47
							Salmonella Reading	2
							Salmonella Senftenberg	4
							Salmonella Stanley	11
							Salmonella Albany	3
	Gallus gallus (fowl) - laying hens - adult - Farm - Croatia - environmental sample - Control and eradication programmes - Official and industry sampling - Census	herd/flock	387	Y	387	28	Salmonella Bovismorbificans	1
							Salmonella Coeln	3
							Salmonella Enteritidis	7
							Salmonella Infantis	3
							Salmonella Joal	3
							Salmonella Senftenberg	4
							Salmonella Thompson	2
							Salmonella Tshiongwe	2
							Salmonella Enteritidis	1
							Salmonella Enteritidis	1
	Turkeys - breeding flocks, unspecified - adult - Farm - Croatia - environmental sample - Control and eradication programmes - Official and industry sampling - Census	herd/flock	3	Y	3	1	Salmonella Enteritidis	1
							Salmonella Enteritidis	1
	Turkeys - fattening flocks - before slaughter - Farm - Croatia - environmental sample - Control and eradication programmes - Official and industry sampling - Census	herd/flock	240	Y	240	29	Salmonella Agona	1
							Salmonella Coeln	2
							Salmonella Enteritidis	1
							Salmonella Infantis	20
							Salmonella Kalamu	1
							Salmonella Senftenberg	2
							Salmonella Stanley	2

Table SALMONELLA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Bakery products - cakes - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	275	0	Salmonella spp., unspecified	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/fee d)	25	Gram	12	0	Salmonella	0
		single (food/fee d)	25	Gram	37	0	Salmonella	0
	Dairy products (excluding cheeses) - butter - made from raw or low heat-treated milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/fee d)	25	Gram	1	0	Salmonella	0
	Dairy products (excluding cheeses) - cream - made from raw or low heat-treated milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/fee d)	25	Gram	12	0	Salmonella	0
		single (food/fee d)	25	Gram	6	0	Salmonella	0
	Dairy products (excluding cheeses) - fermented dairy products - fermented cream - Border inspection activities - Not Available - Not Available - Survey - national survey - Official sampling - Selective sampling	batch (food/fee d)	25	Gram	4	0	Salmonella	0
	Dairy products (excluding cheeses) - ice-cream - made from pasteurised milk - Border inspection activities - Not Available - Not Available - Survey - national survey - Official sampling - Selective sampling	batch (food/fee d)	25	Gram	2	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/fee d)	25	Gram	7	0	Salmonella	0
	Fruits and vegetables - pre-cut - ready-to-eat - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	21	0	Salmonella spp., unspecified	0
	Meat from bovine animals - carcase - chilled - Slaughterhouse - Not Available - Not Available - Survey - national survey - Official, based on Regulation 854/2004 - Census	slaughte r animal batch	Not Available	391	11	Salmonella 4,5,12:i:-	2	
						Salmonella Brandenburg	3	
						Salmonella Derby	2	
						Salmonella Enteritidis	1	
						Salmonella Infantis	1	
						Salmonella Typhimurium	2	
	Meat from bovine animals - minced meat - intended to be eaten cooked - chilled - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/fee d)	10	Gram	39	0	Salmonella	0
		single (food/fee d)	10	Gram	14	0	Salmonella	0
	Meat from bovine animals and pig - meat preparation - intended to be eaten cooked - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/fee d)	10	Gram	201	0	Salmonella spp., unspecified	0
	Meat from bovine animals and pig - minced meat - intended to be eaten cooked - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/fee d)	10	Gram	17	2	Salmonella	2

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from bovine animals and pig - minced meat - intended to be eaten cooked - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed)	10	Gram	32	1	Salmonella	1
	Meat from broilers (Gallus gallus) - carcase - chilled - Slaughterhouse - Not Available - Not Available - Survey - national survey - Official sampling - Census	slaughter animal batch		Not Available	23	8	Salmonella Enteritidis	2
							Salmonella Infantis	6
	Meat from broilers (Gallus gallus) - fresh - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	480	53	Salmonella Agona	2
							Salmonella Enteritidis	2
							Salmonella Infantis	46
							Salmonella Thompson	1
							Salmonella Typhimurium	2
	Meat from broilers (Gallus gallus) - meat preparation - intended to be eaten cooked - frozen - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed)	25	Gram	4	0	Salmonella	0
	Meat from broilers (Gallus gallus) - mechanically separated meat (MSM) - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed)	10	Gram	3	0	Salmonella	0
	Meat from pig - carcase - chilled - Slaughterhouse - Not Available - Not Available - Survey - national survey - Official, based on Regulation 854/2004 - Census	slaughter animal batch		Not Available	2938	65	Salmonella	8
							Salmonella 4,5,12:i-	5
							Salmonella Agona	1
							Salmonella Brandenburg	3
							Salmonella Derby	29
							Salmonella Enteritidis	1
							Salmonella Infantis	1
							Salmonella Livingstone	1
							Salmonella London	3
							Salmonella Rissen	1
							Salmonella Typhimurium	12
	Meat from pig - meat preparation - intended to be eaten cooked - chilled - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed)	10	Gram	39	0	Salmonella	0
		single (food/feed)	10	Gram	28	1	Salmonella	1
	Meat from pig - minced meat - intended to be eaten cooked - chilled - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed)	10	Gram	33	2	Salmonella	2
		single (food/feed)	10	Gram	7	0	Salmonella	0
	Meat, mixed meat - meat products - meat specialties - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed)	25	Gram	17	0	Salmonella	0
		single (food/feed)	25	Gram	9	0	Salmonella	0
	Milk, cows' - raw milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed)	25	Millilitre	3	0	Salmonella	0
	Molluscan shellfish - raw - chilled - Packing centre - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed)	25	Gram	10	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Other processed food products and prepared dishes - ices and similar frozen desserts - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	279	0	Salmonella spp., unspecified	0
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed)	25	Gram	333	0	Salmonella spp., unspecified	0

Table SALMONELLA in feed

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Zagrebačka županija (NUTS 2006)	Compound feedingstuffs for cattle - final product - non-pelleted/meal - Feed mill - Not Available - feed sample - Monitoring - Official sampling - Objective sampling	single (food/feed)	50	Gram	20	1	Salmonella Enteritidis	1
Varaždinska županija (NUTS 2006)	Compound feedingstuffs for poultry (non specified) - final product - non-pelleted/meal - Feed mill - Not Available - feed sample - Monitoring - Official sampling - Objective sampling	batch (food/feed)	50	Gram	51	1	Salmonella Mbandaka	1
Bjelovarsko-bilogorska županija (NUTS 2006)	Feed material of oil seed or fruit origin - soya (bean) derived - Feed mill - Not Available - feed sample - Monitoring - Official sampling - Objective sampling	batch (food/feed)	50	Gram	31	1	Salmonella Infantis	1
Požeško-slavonska županija (NUTS 2006)	Compound feedingstuffs for poultry, breeders - final product - non-pelleted/meal - Feed mill - Not Available - feed sample - Monitoring - Official sampling - Objective sampling	batch (food/feed)	50	Gram	51	1	Salmonella Coeln	1
Vukovarsko-srijemska županija (NUTS 2006)	Compound feedingstuffs, not specified - final product - pelleted - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	50	Gram	4	2	Salmonella spp., unspecified	2
	Feed material of oil seed or fruit origin - sunflower seed derived - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/feed)	50	Gram	13	3	Salmonella spp., unspecified	3
Sisačko-moslavačka županija (NUTS 2006)	Compound feedingstuffs for cattle - final product - non-pelleted/meal - Feed mill - Not Available - feed sample - Monitoring - Official sampling - Objective sampling	batch (food/feed)	50	Gram	20	1	Salmonella Senftenberg	1
	Compound feedingstuffs for pigs - final product - non-pelleted/meal - Feed mill - Not Available - feed sample - Monitoring - Official sampling - Objective sampling	single (food/feed)	50	Gram	47	1	Salmonella Havana	1

Table STAPHYLOCOCCAL ENTEROTOXINS in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Cheeses made from cows' milk - hard - made from pasteurised milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed)	25	Gram	12	0	Staphylococcal enterotoxins	0
		single (food/feed)	25	Gram	5	0	Staphylococcal enterotoxins	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed)	25	Gram	27	0	Staphylococcal enterotoxins	0
		single (food/feed)	25	Gram	4	0	Staphylococcal enterotoxins	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed)	25	Gram	7	0	Staphylococcal enterotoxins	0

Table STAPHYLOCOCCUS AUREUS METICILLIN RESISTANT (MRSA) in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Bakery products - cakes - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed d)	10	Gram	275	1	Staphylococcus aureus	1
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed d)	25	Gram	35	0	Staphylococcus aureus	0
	Cheeses made from cows' milk - hard - made from pasteurised milk - Border inspection activities - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Gram	1	0	Staphylococcus aureus	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Border inspection activities - Not Available - Not Available - Survey - national survey - Official sampling - Selective sampling	batch (food/feed d)	25	Gram	4	0	Staphylococcus aureus	0
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	batch (food/feed d)	25	Gram	27	0	Staphylococcus aureus	0
		single (food/feed d)	25	Gram	8	0	Staphylococcus aureus	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Not Available - Not Available - Survey - national survey - Official sampling - Census	single (food/feed d)	25	Gram	7	0	Staphylococcus aureus	0
	Other processed food products and prepared dishes - ices and similar frozen desserts - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed d)	10	Gram	279	0	Staphylococcus aureus	0
	Other processed food products and prepared dishes - unspecified - ready-to-eat foods - Retail - Not Available - Not Available - Surveillance - Official sampling - Objective sampling	single (food/feed d)	10	Gram	333	6	Staphylococcus aureus	6

Table TRICHINELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Badgers - wild - Hunting - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	2	0	Trichinella	0
	Bears - wild - Game handling establishment - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	50	0	Trichinella	0
	Deer - wild - Hunting - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	11	0	Trichinella	0
	Foxes - wild - Hunting - Croatia - animal sample - organ/tissue - Monitoring - Official sampling - Objective sampling	animal	609	20	Trichinella	0
					Trichinella britovi	20
	Mouflons - wild - Hunting - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	2	0	Trichinella	0
	Pigs - mixed herds - Farm - Croatia - animal sample - organ/tissue - Monitoring - active - Official sampling - Census	animal	24559 9	9	Trichinella spiralis	3
					Trichinella, unspecified sp.	6
	Pigs - mixed herds - Slaughterhouse - Croatia - animal sample - organ/tissue - Monitoring - active - Official sampling - Census	animal	11454 71	0	Trichinella	0
	Rats - Farm - Croatia - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	2	0	Trichinella	0
	Solipeds, domestic - horses - Slaughterhouse - Croatia - animal sample - organ/tissue - Monitoring - active - Official sampling - Census	animal	455	0	Trichinella	0
	Wild boars - wild - Game handling establishment - Croatia - animal sample - organ/tissue - Monitoring - active - Official sampling - Census	animal	7075	0	Trichinella	0
	Wild boars - wild - Hunting - Croatia - animal sample - organ/tissue - Monitoring - active - Official sampling - Census	animal	19575	21	Trichinella britovi	2
					Trichinella spiralis	3
					Trichinella, unspecified sp.	16

Table TRICHINELLA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from pig - meat products - fermented sausages - Veterinary clinics - Croatia - food sample - Surveillance - Official sampling - Objective sampling	single (food/feed)	100	Gram	3	3	Trichinella spiralis	2
							Trichinella, unspecified sp.	1

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

Causative agent	Food vehicle	Outbreak strenght							
		Strong				Weak			
		N outbreaks	N human cases	N hospitalized	N deaths	N outbreaks	N human cases	N hospitalized	N deaths
Campylobacter jejuni	Unknown					1	6	0	0
Clostridium botulinum	Meat and meat products	2	5	1	0				
Enterotoxin, unspecified	Mixed food	1	45	9	0				
Francisella tularensis	Unknown					1	5	3	0
Histamine	Fish and fish products	4	61	1	0				
Norovirus	Broiler meat (Gallus gallus) and products thereof	1	9	2	1				
	Unknown	2	193	0	0	5	241	2	0
Rotavirus	Tap water, including well water					1	356	2	0
	Unknown					2	31	1	0
Salmonella	Unknown					1	4	0	0
Salmonella Agona	Unknown					1	4	1	0
Salmonella Enteritidis	Eggs and egg products	4	19	4	0	1	3	0	0
	Pig meat and products thereof	1	5	0	0				
	Broiler meat (Gallus gallus) and products thereof	2	25	0	0	2	7	0	0
	Turkey meat and products thereof					1	5	1	0
	Bakery products	3	25	6	0	1	2	0	0
	Mixed food	2	7	2	0				
	Unknown					5	16	4	0
Salmonella group B	Bakery products	1	5	0	0				
	Unknown					3	7	0	0
	Meat and meat products	1	16	3	0				
Salmonella Senftenberg	Unknown					1	5	0	0
Salmonella Stanley	Turkey meat and products thereof	1	25	1	0				
Salmonella Typhimurium	Unknown					1	5	0	0
Trichinella spiralis	Pig meat and products thereof	2	6	2	0				
Unknown	Unknown					2	16	0	0

Strong Foodborne Outbreaks: detailed data

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Clostridium botulinum	unknown	CIPH_16_03_2015	Household / domestic kitchen	Meat and meat products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	2	1	0
		CIPH_20_07_2015	Household / domestic kitchen	Meat and meat products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	3	0	0
Enterotoxin, unspecified	unknown	CIPH_27_10_2015_2	General	Mixed food	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	unknown	Not Available	NOT AVAILABLE	N_A	1	45	9	0
Histamine	unknown	CIPH_03_04_2015	General	Fish and fish products	N_A	Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	unknown	Not Available	Storage time/temperature abuse	N_A	1	3	1	0
		CIPH_03_08_2015_2	General	Fish and fish products	N_A	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	unknown	Not Available	NOT AVAILABLE	N_A	1	4	0	0
		CIPH_06_03_2015	General	Fish and fish products	N_A	Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomonic to causative agent	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	unknown	Not Available	Storage time/temperature abuse	N_A	1	5	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
Histamine	unknown	CIPH_22_09_2015	General	Fish and fish products	N_A	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	unknown	Not Available	NOT AVAILABLE	N_A	1	49	0	0
Norovirus	unknown	CIPH_02_01_2015	General	Unknown	N_A	Descriptive epidemiological evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	unknown	Not Available	Cross-contamination	N_A	1	74	0	0
		CIPH_02_03_2015	General	Unknown	N_A	Descriptive epidemiological evidence	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	Infected food handler	N_A	1	119	0	0
		CIPH_14_01_2015	General	Broiler meat (Gallus gallus) and products thereof	N_A	Descriptive epidemiological evidence	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	Infected food handler	N_A	1	9	2	1
Salmonella Enteritidis	unknown	CIPH_03_08_2015	Household / domestic kitchen	Bakery products	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	4	0
		CIPH_06_08_2015	Household / domestic kitchen	Mixed food	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		CIPH_09_10_2015	Household / domestic kitchen	Eggs and egg products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	4	0	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella Enteritidis	unknown	CIPH_09_10_2015_2	Household / domestic kitchen	Broiler meat (Gallus gallus) and products thereof	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	4	0	0
		CIPH_10_02_2015_5	Household / domestic kitchen	Eggs and egg products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	4	1	0
		CIPH_17_07_2015_5	Household / domestic kitchen	Eggs and egg products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	7	3	0
		CIPH_19_01_2016_6	Household / domestic kitchen	Eggs and egg products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	Inadequate heat treatment	N_A	1	4	0	0
		CIPH_21_10_2015_5	General	Broiler meat (Gallus gallus) and products thereof	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	School or kindergarten	unknown	Not Available	NOT AVAILABLE	N_A	1	21	0	0
		CIPH_26_01_2016_6	Household / domestic kitchen	Pig meat and products thereof	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	0	0
		CIPH_26_03_2015_5	Household / domestic kitchen	Mixed food	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	2	0
		CIPH_26_08_2015_5	Household / domestic kitchen	Bakery products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	2	0
Salmonella group B	unknown	CIPH_28_04_2015_5	Household / domestic kitchen	Bakery products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	15	0	0
		CIPH_07_10_2015_5	Household / domestic kitchen	Meat and meat products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	16	3	0
		CIPH_31_08_2015_5	Household / domestic kitchen	Bakery products	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	0	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella Stanley	unknown	CIPH_21_05_2015	General	Turkey meat and products thereof	N_A	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	unknown	Not Available	Inadequate heat treatment	N_A	1	25	1	0
Trichinella spiralis	unknown	CIPH_09_02_2015	Household / domestic kitchen	Pig meat and products thereof	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	Unprocessed contaminated ingredient	N_A	1	2	1	0
		CIPH_29_01_2015	Household / domestic kitchen	Pig meat and products thereof	N_A	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	Unprocessed contaminated ingredient	N_A	1	4	1	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
Campylobacter jejuni	unknown	CIPH_29_05_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	6	0	0
Francisella tularensis	unknown	CIPH_26_03_2015_2	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	3	0
Norovirus	unknown	CIPH_06_03-2015_2	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	NOT AVAILABLE	N_A	1	43	0	0
		CIPH_13_02_2015	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	NOT AVAILABLE	N_A	1	40	0	0
		CIPH_14_09_2015	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	NOT AVAILABLE	N_A	1	25	1	0
		CIPH_23_03_2015	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	NOT AVAILABLE	N_A	1	19	1	0
		CIPH_30_03_2015	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	NOT AVAILABLE	N_A	1	114	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
Rotavirus	unknown	CIPH_06_07_2015	General	Tap water, including well water	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Others	unknown	Not Available	NOT AVAILABLE	N_A	1	356	2	0
		CIPH_08_06_2015	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	NOT AVAILABLE	N_A	1	16	1	0
		CIPH_21_04_2015	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Residential institution (nursing home or prison or boarding school)	unknown	Not Available	NOT AVAILABLE	N_A	1	15	0	0
Salmonella	unknown	CIPH_12_01-2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	4	0	0
Salmonella Agona	unknown	CIPH_28_08_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	4	1	0
Salmonella Enteritidis	unknown	CIPH_05_06_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	3	1	0
		CIPH_06_08_2015_2	General	Broiler meat (Gallus gallus) and products thereof	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	unknown	Not Available	NOT AVAILABLE	N_A	1	2	0	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella Enteritidis	unknown	CIPH_06_08_2015_3	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	unknown	Not Available	NOT AVAILABLE	N_A	1	6	0	0
		CIPH_09_11_2015	Household / domestic kitchen	Broiler meat (Gallus gallus) and products thereof	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	0	0
		CIPH_16_11_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		CIPH_21_09_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		CIPH_24_02_2015	Household / domestic kitchen	Bakery products	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		CIPH_24_02_2015_2	Household / domestic kitchen	Eggs and egg products	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	Inadequate heat treatment	N_A	1	3	0	0
		CIPH_27_10_2015	Household / domestic kitchen	Turkey meat and products thereof	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	1	0
		CIPH_28_07_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	3	3	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella group B	unknown	CIPH_02_06_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	2	0	0
		CIPH_12_05_2015	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	3	0	0
		CIPH_24_12_2015	General	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	unknown	Not Available	NOT AVAILABLE	N_A	1	2	0	0
Salmonella Senftenberg	unknown	CIPH_28_08_2016_2	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	0	0
Salmonella Typhimurium	unknown	CIPH_28_08_2015_3	Household / domestic kitchen	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	5	0	0
Unknown	unknown	CIPH_10_07_2015	Household / domestic kitchen	Unknown	N_A	Descriptive epidemiological evidence	Household	unknown	Not Available	NOT AVAILABLE	N_A	1	9	0	0
		CIPH_18_09_2015	General	Unknown	N_A	Descriptive epidemiological evidence	Others	unknown	Not Available	NOT AVAILABLE	N_A	1	7	0	0

ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

Table Antimicrobial susceptibility testing of Campylobacter coli in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
ECOFF	0.5	8	2	16	4	2
Lowest limit	0.06	0.5	0.12	2	1	0.25
Highest limit	4	32	16	64	16	16
N of tested isolates	7	7	7	7	7	7
N of resistant isolates	3	0	0	3	3	4
MIC						
0.12	2					
0.25			2			
0.5			5			
2					2	
4	1			2		
>4	2					
8				2		
>16					3	4
64				3		
<=0.06	2					
<=0.25						3
<=0.5		7				
<=1					2	

Table Antimicrobial susceptibility testing of Campylobacter coli 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
ECOFF	0.5	8	2	16	4	2
Lowest limit	0.06	0.5	0.12	2	1	0.25
Highest limit	4	32	16	64	16	16
N of tested isolates	72	72	72	72	72	72
N of resistant isolates	59	9	1	58	63	63
MIC						
0.12	5					
0.25	1		5			
0.5			36			1
1		8	23			1
2	1	1	2		2	1
4	6			5	3	2
>4	52					
8				5	3	4
16				3	14	8
>16			1		46	49
32		1		9		
>32		8				
64				30		
>64				19		
<=0.06	7					
<=0.12			5			
<=0.25						6
<=0.5		54				
<=1					4	
<=2				1		

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
ECOFF	0.5	8	2	16	4	2
Lowest limit	0.06	0.5	0.12	2	1	0.25
Highest limit	4	32	16	64	16	16
N of tested isolates	36	36	36	36	36	36
N of resistant isolates	29	0	1	30	8	16
MIC						
0.12	4					
0.25			2			
0.5	1		29			
1	1	2				1
2	3		1		14	
4	3			6	2	1
>4	22					
8			1		4	
16					3	1
>16					1	14
32				1		
64				15		
>64				14		
<=0.06	2					
<=0.12			3			
<=0.25						19
<=0.5		34				
<=1					12	

Table Antimicrobial susceptibility testing of Campylobacter jejuni in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
ECOFF	0.5	4	2	16	4	1
Lowest limit	0.06	0.5	0.12	2	1	0.25
Highest limit	4	32	16	64	16	16
N of tested isolates	48	48	48	48	48	48
N of resistant isolates	27	0	0	27	2	16
MIC						
0.12	6					
0.25			23			
0.5	1		7			4
1	1		1			2
2					7	
4	3			12	3	
>4	23					
8				7		
16					2	1
>16						15
32				3		
64				14		
>64				10		
<=0.06	14					
<=0.12			17			
<=0.25						26
<=0.5		48				
<=1					36	
<=2				2		

Table Antimicrobial susceptibility testing of Campylobacter jejuni 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
ECOFF	0.5	4	2	16	4	1
Lowest limit	0.06	0.5	0.12	2	1	0.25
Highest limit	4	32	16	64	16	16
N of tested isolates	1	1	1	1	1	1
N of resistant isolates	1	0	0	0	0	1
MIC						
0.25			1			
>4	1					
8						1
<=0.5		1				
<=1					1	
<=2				1		

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ciprofloxacin	Erythromycin (Erythromycin A)	Gentamicin	Nalidixic acid	Streptomycin	Tetracycline
ECOFF	0.5	4	2	16	4	1
Lowest limit	0.06	0.5	0.12	2	1	0.25
Highest limit	4	32	16	64	16	16
N of tested isolates	45	45	45	45	45	45
N of resistant isolates	34	0	0	35	5	13
MIC						
0.12	8					
0.25	1		25			
0.5	1		16			
1		1				1
2	1		1		8	
4	7			9	1	
>4	26					
8				1	2	
16					2	3
>16					1	10
32				1		
64				10		
>64				24		
<=0.06	1					
<=0.12			3			
<=0.25						31
<=0.5		44				
<=1					31	

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

Table Antimicrobial susceptibility testing of Salmonella Agona in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)															
Country of Origin: Croatia															
AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim	
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2	
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25	
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32	
N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
N of resistant isolates	1	0	0	0	0	0	0	0	0	0	1	0	0	1	
MIC															
0.5														1	
4	1														
>32														1	
>64	1														
>1024												1			
<=0.015						1									
<=0.03									1						
<=0.25			1												
<=0.5					1				1						
<=1							1								
<=2													1		
<=4										1					
<=8					1										

Table Antimicrobial susceptibility testing of Salmonella Agona 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Agona in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Brandenburg in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampling Type: environmental sample - boot swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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: Official sampling			Sampling Strategy: Objective sampling					Programme Code: AMR MON						
Analytical Method: Micromethod dilution (in microtiter plate)														
Country of Origin: Croatia														
AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	6	6	6	6	6	6	6	6	6	6	6	6	6	6
N of resistant isolates	2	0	0	0	0	0	0	0	0	0	0	2	0	0
MIC														
0.03	1													
0.5	4													
1	1													
4	1													
8	5													
16	1													
32	2													
64	2													
>64	2	2												
128	1													
<=0.015	5													
<=0.03	6													
<=0.25	6												2	6
<=0.5	6													
<=1	4	6												
<=2	4													
<=4	6													
<=8	6													

Table Antimicrobial susceptibility testing of Salmonella Derby in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Derby 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Derby in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	28	28	28	28	28	28	28	28	28	28	28	28	28	28
N of resistant isolates	0	0	0	0	0	6	0	0	0	0	21	20	0	21
MIC														
0.03						3								
0.5						6							18	
4		12												
8		16												
16										6				
>32														21
64											7			
>64												20		
>1024											21			
<=0.015						19								
<=0.03									28					
<=0.25			28										10	7
<=0.5				28				28						
<=1	28						28							
<=2												8		
<=4										22				
<=8					28									

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: food sample - carcase swabs

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcass swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Enteritidis in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Enteritidis 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - dust

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - cloacal swab

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - organ/tissue

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Fulica in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella II 42:z:1,5 in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Infantis 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON pnl2

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	67	67	67	67	67	67	67	67	67	67	67	67	67	67
N of resistant isolates	7	0	1	1	1	63	0	1	0	63	11	10	1	0
MIC	0.25					7								
	0.5					40							41	11
	1					11		4					19	
	2	40				1	2					1	1	
	4	7	16			2						13		
	>4		1											
	8		25			2				1		2		
	>8			1										
	16	1	24		8			1			12			
	32										25			
	64										11	2		
	>64	6										8		
	128									1	2			
	>128				1					62				
	256										1			
	>1024										11			
	<=0.015					4								
	<=0.03								67					
	<=0.25		66										6	56
	<=0.5			66				62						
	<=1	13					65							
	<=2		2									41		
	<=4									3				
	<=8				58						5			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	15	15	15	15	15	15	15	15	15	15	15	15	15	15
N of resistant isolates	0	0	0	0	0	15	0	0	0	15	2	2	0	0
MIC														
0.25						1								
0.5						10							13	4
1						4		1					1	
2	12													
4	1	4										3		
8		5										1		
16		5			1						3			
32											7	1		
64											2			
>64												1		
128										1				
>128										14				
>1024											2			
<=0.03									15					
<=0.25			15										1	11
<=0.5				15				14						
<=1	2						15							
<=2		1										9		
<=8					14						1			

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella London 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: Micromethod dilution (in microtiter plate)														
Country of Origin: Croatia														
AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
N of resistant isolates	0	0	0	0	0	0	0	0	0	0	1	0	0	0
MIC														
0.5														
2														
4														
>1024														
<=0.015														
<=0.03														
<=0.25														
<=0.5														
<=1														
<=2														
<=4														
<=8														

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	34	34	34	34	34	34	34	34	34	34	34	34	34	34
N of resistant isolates	0	1	0	0	0	30	0	0	0	33	1	0	1	0
MIC														
0.06						2								
0.12						27								
0.5						1							6	3
1						2		4						1
2	4						2	1					1	
4	1	16										1		
8		16												
16					1						4			
32		1									9			
64										2	11			
128										26	9			
>128										5				
>1024											1			
<=0.015						2								
<=0.03									34					
<=0.25			34										27	30
<=0.5				34				29						
<=1	29						32							
<=2		1										33		
<=4										1				
<=8					33									

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella Miami in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Rissen in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Sandiego 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Meat from pig - carcase

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella spp., 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - broilers

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - broilers

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - faeces

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

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

Table Antimicrobial susceptibility testing of Salmonella spp., unspecified in Gallus gallus (fowl) - laying hens

Sampling Stage: Farm

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Stanley in Pigs - fattening pigs

Sampling Stage: Slaughterhouse			Sampling Type: food sample - carcase swabs				Sampling Context: Monitoring							
Sampler: Official sampling			Sampling Strategy: Objective sampling				Programme Code: AMR MON							
Analytical Method: Micromethod dilution (in microtiter plate)														
Country of Origin: Croatia														
AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
N of resistant isolates	0	0	0	0	0	1	0	0	0	1	0	0	0	0
MIC														
0.25	1													
0.5	1													
4	1													
8	1													
64	1													
>128	1													
<=0.03	1													
<=0.25	1													
<=0.5	1													
<=1	1													
<=2	1													
<=8	1													

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

Sampling Stage: Farm

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: environmental sample - boot swabs

Sampling Strategy: Census

Sampling Context: Control and eradication programmes

Programme Code: AMR MON

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	7	7	7	7	7	7	7	7	7	7	7	7	7	7
N of resistant isolates	0	0	0	0	0	7	0	0	0	7	0	0	0	0
MIC														
0.12						1								
0.25						6								
0.5													3	
1								1						
4	1	5										1		
16		1			1						2			
32											4			
64											1			
>128										7				
<=0.03									7					
<=0.25			7										4	7
<=0.5				7				6						
<=1	6						7							
<=2		1										6		
<=8					6									

Table Antimicrobial susceptibility testing of Salmonella Tennessee 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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: Official sampling			Sampling Strategy: Objective sampling					Programme Code: AMR MON						
Analytical Method: Micromethod dilution (in microtiter plate)														
Country of Origin: Croatia														
AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	7	7	7	7	7	7	7	7	7	7	7	7	7	7
N of resistant isolates	5	0	0	0	2	0	0	0	0	0	4	5	0	3
MIC														
0.03	4													
0.5	3													
1	2													
2	1													
4	3													
8	3													
16	1													
32	3													
>32	3													
64	1													
>64	5	4												
>128	2													
>1024	4													
<=0.015	3													
<=0.03	7													
<=0.25	7													
<=0.5	7													
<=1	2	6												
<=2	2													
<=4	6													
<=8	4													

Table Antimicrobial susceptibility testing of Salmonella Typhimurium in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)														
Country of Origin: Croatia														
AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
N of resistant isolates	2	0	0	0	1	0	0	1	0	0	2	2	0	1
MIC														
0.03	2													
0.5	2													
4	1													
8	1													
>32	1													
>64	2	2												
>128	1													
>1024	2													
<=0.03	2													
<=0.25	2													
<=0.5	2													
<=1	2													
<=4	2													
<=8	1													

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	18	18	18	18	18	18	18	18	18	18	18	18	18	18
N of resistant isolates	15	0	0	0	4	3	0	1	0	3	15	14	1	4
MIC														
0.03						12								
0.25						1								
0.5						1							5	
1						1		4					3	
2	3						2						1	
4		12												
8		5								1				
16		1												
>32								1						4
64											2	1		
>64	15											13		
128					1						1			
>128					3					3				
>1024											15			
<=0.015						3								
<=0.03									18					
<=0.25			18										9	14
<=0.5				18				13						
<=1							16							
<=2												4		
<=4										14				
<=8					14									

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: food sample - carcase swabs

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

Sampling Type: food sample - carcass swabs

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

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

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Typhimurium, monophasic 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	16	16	16	16	16	16	16	16	16	16	16	16	16	16
N of resistant isolates	16	0	0	0	1	0	0	0	0	0	15	14	0	3
MIC	0.03					12								
	0.5												11	1
	1							2						
	2						2							
	4	11												
	8	4								1		1		
	>32													3
	64										1			
	>64	16										13		
	>128				1									
	>1024										15			
	<=0.015					4								
	<=0.03								16					
	<=0.25		16										5	12
	<=0.5			16				14						
	<=1						14							
	<=2	1										1		
	<=4									15				
	<=8				15									

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

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Salmonella Typhimurium, monophasic in Meat from bovine animals - carcass

Sampling Stage: Slaughterhouse			Sampling Type: food sample - carcass swabs				Sampling Context: Monitoring							
Sampler: Official sampling			Sampling Strategy: Objective sampling				Programme Code: AMR MON							
Analytical Method: Micromethod dilution (in microtiter plate)														
Country of Origin: Croatia														
AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
ECOFF	8	16	0.5	2	16	0.064	2	2	0.125	16	256	8	1	2
Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
N of resistant isolates	1	0	0	0	0	0	0	0	0	0	1	1	0	0
MIC														
0.03	1													
0.5	1													
4	1													
>64	1													
>1024	1													
<=0.03	1													
<=0.25	1													
<=0.5	1													
<=1	1													
<=4	1													
<=8	1													

Table Antimicrobial susceptibility testing of Salmonella Virchow in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

MIC	AM substance	Cefepime	Cefotaxim	Clavulanic acid	Cefotaxime + Cefoxitin	Ceftazidim	Clavulanic acid	Ceftazidime + 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	0.06	0.5	0.125	32
	Lowest limit	0.06	0.25	0.06	0.5	0.25	0.12	0.015	0.12	0.03	0.5
	Highest limit	32	64	64	64	128	128	2	16	16	128
	N of tested isolates	4	4	4	4	4	4	4	4	4	4
N of resistant isolates	4	4	0	0	3	0	0	0	0	0	0
0.12	1										
0.25						1	2				
0.5						1					
1						2					
2	1					1					
4	2				4	2					
8	1	2									
16			2								
32			1								
64			1								
<=0.015								4			
<=0.03										4	
<=0.06	3										
<=0.12	3						2				

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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	N of resistant isolates	19	0	0	0	11	8	0	1	0	5	23	29	0	4
0.12							2								
0.25							3								
0.5							1							1	9
1									12					1	
2		38						1	1						
4		24	59												
8			15				2						1		
16						1			1			19			
32												5	2		
>32															4
64						1						1	4		
>64		19											23		
128						3					2				
>128						7					3				
1024												1			
>1024												22			
<=0.015							77								
<=0.03										85					
<=0.25				85										83	72
<=0.5					85				71						
<=1		4						84							
<=2			11										55		

MIC	AM											Nalidixic			
	substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	N of resistant isolates	19	0	0	0	11	8	0	1	0	5	23	29	0	4
	<=4											80			
<=8	73										37				

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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	0.06	0.5	0.125	32
Lowest limit	0.06	0.25	0.06	0.06	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	128
N of tested isolates	11	11	11	11	11	11	11	11	11	11	11	11
N of resistant isolates	7	11	4	4	4	8	4	4	0	0	0	0
									4			
									1			
	2											
										1		
						3						
		1		1		1						
	2			1	1	3		2				3
	3	1		1	4			1				5
		2		1	2	3		1				3
	2	1				1						
		2			3							
		2			1							
		2										
									6			
											11	
	2		7									
							7			10		

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

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

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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	N of resistant isolates	28	0	0	0	9	6	0	3	0	9	34	48	0	18
0.03							4								
0.06							2								
0.12							2								
0.25							1								
0.5							2							3	9
1									13						2
2		23							1						2
4		25	58						1						
8		2	13						1		1				
>8							1								
16			1			2					1	10	1		
32		1				1					1	5	1		
>32									1						18
64											3	3	9		
>64		27											37		
128						4					3	1			
>128						4					2				
1024												1			
>1024												32			
<=0.015							73								
<=0.03										85					
<=0.25				85										82	54

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	N of resistant isolates	28	0	0	0	9	6	0	3	0	9	34	48	0	18
<=0.5	85				68										
<=1	7				85										
<=2	13												37		
<=4	74														
<=8	74										33				

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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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	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	0.06	0.5	0.125	32
Lowest limit	0.06	0.25	0.06	0.06	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	128
N of tested isolates	34	34	34	34	34	34	34	34	34	34	34	34	34
N of resistant isolates	22	34	18	18	16	32	18	18	18	1	0	0	0
0.03										9			
0.06										1			
0.12	7									1			
0.25	6						2	1		3			
0.5	2			3		2				1			
1		4		3		6			2				
2	2	6		4	3	6			5				1
4	5	2		6	10	6			7				18
8	5	8		2	4	11			4				15
16	1	3			3	2							
32	1	2			6	1							
64		6			6								
>64		3			1								
<=0.015										23			
<=0.03												34	
<=0.06	5		16										
<=0.12							2	11		30			

MIC	AM substance	Cefepime	Cefotaxim	Cefotaxime + Clavulanic acid		Cefoxitin	Ceftazidim	Ceftazidime + Clavulanic acid		Ertapenem	Imipenem	Meropenem	Temocillin	
	Cefotaxime synergy test	Not Available	Not Available	Positive/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	
	ECOFF	0.125	0.25	0.25	0.25	8	0.5	0.5	0.5	0.5	0.06	0.5	0.125	32
	Lowest limit	0.06	0.25	0.06	0.06	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	128
	N of tested isolates	34	34	34	34	34	34	34	34	34	34	34	34	34
	N of resistant isolates	22	34	18	18	16	32	18	18	18	1	0	0	0
	<=0.5	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: ESBL MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	34	34	34	34	34	34	34	34	34	34	34	34	34	34
	N of resistant isolates	34	0	34	33	3	18	0	5	0	13	28	25	0	18
0.12							1								
0.25							9								
0.5				1			3							6	1
1					7		1		5						
2				9	5			2							
4			18	7	12										
>4				17											
8			10		7		1				5				
>8				2			3								
16						1						2			
32						1			2				1		
>32								3							18
64		1									1		11		
>64		33											13		
128						1					6				
>128						1					6				
>1024												28			
<=0.015							16								
<=0.03										34					
<=0.25														28	15
<=0.5					1				24						
<=1								32							

MIC	AM	Nalidixic acid														
	substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	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	34	34	34	34	34	34	34	34	34	34	34	34	34	34	
	N of resistant isolates	34	0	34	33	3	18	0	5	0	13	28	25	0	18	
	<=2												9			
	<=4												16			
<=8												4				

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

MIC	AM substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Nalidixic acid	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	N of resistant isolates	52	1	1	1	7	65	1	4	0	60	28	34	0	26
0.03							1								
0.12							4								
0.25							17								
0.5							6							16	8
1		1					3		39					1	
2		19					1	7	4						1
4		8	50				5								
>4				1											
8		1	19		1		15				1				
>8							14								
16						1					2	16	1		
>16								1							
32			1			3			1			10			
>32								3							26
64		1				1					5		7		
>64		51											26		
128						3					14				
>128											41				
>1024												28			
<=0.015							19								
<=0.03									85						
<=0.25				84										68	50

MIC	AM	Nalidixic acid													
	substance	Ampicillin	Azithromycin	Cefotaxim	Ceftazidim	Chloramphenicol	Ciprofloxacin	Colistin	Gentamicin	Meropenem	Sulfamethoxazole	Tetracycline	Tigecycline	Trimethoprim	
	ECOFF	8	16	0.25	0.5	16	0.064	2	2	0.125	16	64	8	1	2
	Lowest limit	1	2	0.25	0.5	8	0.015	1	0.5	0.03	4	8	2	0.25	0.25
	Highest limit	64	64	4	8	128	8	16	32	16	128	1024	64	8	32
	N of tested isolates	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	N of resistant isolates	52	1	1	1	7	65	1	4	0	60	28	34	0	26
<=0.5		84				38									
<=1		4				77									
<=2		15				51									
<=4						22									
<=8						31									

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

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON pnl2

Analytical Method: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic, unspecified in 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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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
Ceftazidime synergy test	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	0.25	8	0.5	0.5	0.5	0.06	0.5	0.125	32
Lowest limit	0.06	0.25	0.06	0.06	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	128
N of tested isolates	4	4	4	4	4	4	4	4	4	4	4	4
N of resistant isolates	4	4	2	2	2	4	2	2	0	0	0	0
MIC												
0.03	2											
0.25	2											
1	1											
2	1											
4	1											
8	3											
32	1											
<=0.015	2											
<=0.03	4											
<=0.06	2											
<=0.12	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: Micromethod dilution (in microtiter plate)

Country of Origin: Croatia

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

OTHER ANTIMICROBIAL RESISTANCE TABLES

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Cattle (bovine animals) - meat production animals - calves (under 1 year)

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Croatia

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin (Erythromycin A)	Gentamicin	Linezolid	Quinupristin/Dalfo pristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	16	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
MIC Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
0.06											6	
0.12											23	
0.25			3								2	
0.5			19	2								
1	12		10	18			9	3				
2	4			11	4		22	3				11
4		1	1	1	3			7				2
8		13						13				
16						5		8		1		
32				1				1		4		
64		5								7		
128		1								3		
>128		1			7							
<=0.03											4	
<=0.12			2									
<=0.25				2								
<=0.5	19						4		35			
<=1					21					20		23
<=4		14										
<=8						30						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Pigs - fattening pigs

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Croatia

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin (Erythromycin A)	Gentamicin	Linezolid	Quinupristin/Dalfo pristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	16	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
MIC Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
0.06											5	
0.12											23	
0.25			2								5	
0.5			11	1							1	
1	16		16	10			10					
2	5		1	20	5		22	1				15
4			1	2	2		3	2				
8		22						10				
16			1	2		12		22		1		
>16			2									
32						1				3		
64		2				2				15		
128		3								8		
>128					12					1		
256						1						
1024						1						
<=0.03											1	
<=0.12			1									
<=0.5	14								35			
<=1					16					7		20
<=4		8										
<=8						18						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecalis in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Croatia

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin (Erythromycin A)	Gentamicin	Linezolid	Quinupristin/Dalfo pristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	16	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
MIC Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
0.06											10	
0.12											38	
0.25			2								37	
0.5			13	8							2	
1	65		43	54			15	1				
2	2		1	23	10		68	1				52
4					3		1	6				8
8		73	1		3	1		45				
16		2	6		3	11		36				
>16			24									
32					1			1		9		
64		1			1					21		
128					1					26		
>128					28					1		
256						1						
<=0.03											4	
<=0.12			1									
<=0.25				6								
<=0.5	24						7	1	91			
<=1					41					34		31
<=4		15										
<=8						78						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Cattle (bovine animals) - meat production 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: Micromethod dilution (in microtiter plate)

Country Of Origin:Croatia

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin (Erythromycin A)	Gentamicin	Linezolid	Quinupristin/Dalfo pristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
MIC Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
0.06											28	
0.12											18	
0.25			1								1	
0.5			6	2								
1	20		17	8				10				
2	13		10	21	11		45	11				4
4	1		13	16	7		5	16				
8		25	3	1	6			1				
16		1				7						
32	1	2				1				2		
64	1									3		
>64	1											
128										6		
>128					4							
<=0.03											3	
<=0.25				2								
<=0.5	13							12	50			
<=1					22					39		45
<=4		22										
<=8						42						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium 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: Micromethod dilution (in microtiter plate)

Country Of Origin:Croatia

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin (Erythromycin A)	Gentamicin	Linezolid	Quinupristin/Dalfo pristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
MIC Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
0.06											21	
0.12											17	
0.25			2								2	
0.5			14	1								
1	17		21	7			4	5	2			
2	15		6	22	10		45	12				2
4	2		4	20	23		1	27				
8		21			3							
16						13		1		1		
>16			1									
32		1				1						
64										2		
128		1								6		
>128					3							
<=0.03											10	
<=0.12			2									
<=0.5	16							5	48			
<=1					11					41		48
<=4		27										
<=8						36						

Table Antimicrobial susceptibility testing of Enterococcus, non-pathogenic - E. faecium in Gallus gallus (fowl) - broilers

Sampling Stage: Slaughterhouse

Sampler: Official sampling

Analytical Method: Micromethod dilution (in microtiter plate)

Country Of Origin:Croatia

Sampling Type: animal sample - caecum

Sampling Strategy: Objective sampling

Sampling Context: Monitoring

Programme Code: AMR MON

AM substance	Ampicillin	Chloramphenicol	Ciprofloxacin	Daptomycin	Erythromycin (Erythromycin A)	Gentamicin	Linezolid	Quinupristin/Dalfo pristin	Teicoplanin	Tetracycline	Tigecycline	Vancomycin
ECOFF	4	32	4	4	4	32	4	1	2	4	0.25	4
Lowest limit	0.5	4	0.12	0.25	1	8	0.5	0.5	0.5	1	0.03	1
MIC Highest limit	64	128	16	32	128	1024	64	64	64	128	4	128
0.06											17	
0.12											32	
0.25											14	
0.5			2								1	
1	20		7	4			7	21	1			
2	18		21	36	8		57	7				2
4	10		30	25	1		2	17		1		2
8	3	15	4		1			1		2		
16	2	13	1			13		1				
>16			2									
32	3	8								2		
64		2				2				4		
128						1				30		
>128					10					1		
>1024						1						
<=0.03											3	
<=0.25				2								
<=0.5	11						1	20	66			
<=1					47					27		63
<=4		29										
<=8						50						

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

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

