

ZOONOSES MONITORING

Hungary

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

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

IN 2014

PRFFACE

This report is submitted to the European Commission in accordance with Article 9 of Council Directive 2003/99/EC*. The information has also been forwarded to the European Food Safety Authority (EFSA).

The report contains information on trends and sources of zoonoses and zoonotic agents in Hungary during the year 2014.

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 ANIMAL POPULATIONS

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

1.1.1 Information on susceptible animal population

Sources of information

Data on susceptible animal populations were taken from official publications of the Hungarian Central Statistical Office unless it was collected by the Directorate of Food Chain Safety and Animal Health of the National Food Chain Safety Office.

Dates the figures relate to and the content of the figures

The figures relate to year 2013.

National evaluation of the numbers of susceptible population and trends in these figures

Data of December 2013 show that the number of cattle continued togrow. The pig stock after 3 years of decrease and a slightly rose in 2012 is stable. The stock of poultryincreased compared to December of the previous year.

Additional information

2 DISEASE STATUS

2.1 TUBERCULOSIS, MYCOBACTERIAL DISEASES

2.1.1 General evaluation of the national situation

2.1.1.1 Mycobacterium - general evaluation

History of the disease and/or infection in the country

In bovine populations, eradication measures for tuberculosis started in 1962. The eradication of bovine tuberculosis was considered to be completed at the end of 1980. Since then, only sporadic cases occur. As regards of tuberculosis in man, the favourable tendency which could be observed from the 1950s in the epidemiology of tuberculosis seemed to stop and getting worse in 1990. (Incidence raised by 19% between 1990 and 1995.) In order to lower the incidence and improve the situation, a National Tuberculosis Programme was adopted in 1994 which also incorporated a national surveillance programme based on a central, computerised database.

Recent actions taken to control the zoonoses

Regular screening of the human population is provided. All farm workers have to be checked by the competent public health authority for their compliance with the rules set for persons dealing with animals and food intended for human consumption. The documents proving their compliance are subject to on farm checks performed by the veterinary service. Each county veterinary authority has the right to set further health requirements for persons dealing with animals kept on small size farms.

2.1.2 Mycobacterium in animals

2.1.2.1 M. bovis in animal - Cattle (bovine animals)

Status as officially free of bovine tuberculosis during the reporting year

The entire country free

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

Monitoring system

Sampling strategy

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

Frequency of the sampling

See above.

Methods of sampling (description of sampling techniques)

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

Case definition

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

Diagnostic/analytical methods used

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

Vaccination policy

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

Control program/mechanisms

The control program/strategies in place

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

Recent actions taken to control the zoonoses

Guidelines have been issued first by the Ministry of Agriculture and Rural Development and later by the Central Agricultural Office (the currently valid guideline was issued in March 2010) about the carrying out the tuberculin test in cattle herds taking into consideration the fals positive or interference reactions as well as the data collection, and reporting by the regional authorities.

Measures in case of the positive findings or single cases

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

Notification system in place

Bovine tuberculosis is compulsory notifiable by virtue of the Veterinary Act No CLXXVI. of 2005, which replaced the Veterinary Act No XCI of 1995, from 1 September 2008 by the Decree No 113/2008 (VIII. 30.) of the Ministry of Agriculture and Rural Development (MARD) on notification of animal diseases. The detailed rules regarding bovine tuberculosis are laid down by the Decree No. 65/2002. (VIII.9) FVM of the Minister of Agriculture and Rural Development, which texts replaced the relevant parts of the Zoo-Sanitary Code implemented by the Decree No 41/1997. (V. 28.) FM of the Minister of Agriculture. As regards keeping and movements of the bovine animals the Zoosanitary Code is applied further. Before the 1st of July of 1997 the Decree No. 28/1981. (XII. 30.) MEM of the Minister of Agriculture and Alimentation contained the rules for the bovine tuberculosis and keeping or movements of the bovine animals. It is very important that the former legislative rules were essentially the same as the current ones.

Results of the investigation

During the past consecutive eight years the rate of herds infected with bovine tuberculosis has never reached 0,1 % and at least 99,9% of herds have achieved officially tuberculosis free status each year during this period.

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

Hungary is free of bovine tuberculosis. However, sporadic cases are reported.

2.2 BRUCELLOSIS

2.2.1 General evaluation of the national situation

2.2.1.1 Brucella - general evaluation

History of the disease and/or infection in the country

Hungary is practically free of Brucellosis in bovine, ovine and caprine populations. For detailed information, please refer to the specific texts.

2.2.2 Brucella in animals

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

Status as officially free of bovine brucellosis during the reporting year

The entire country free

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

Monitoring system

Sampling strategy

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

Frequency of the sampling

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

Type of specimen taken

Blood

Methods of sampling (description of sampling techniques)

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

Case definition

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

Diagnostic/analytical methods used

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

Vaccination policy

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

Control program/mechanisms

Recent actions taken to control the zoonoses

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

Measures in case of the positive findings or single cases

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

Notification system in place

Bovine brucellosis (B. abortus) is compulsorily notifiable by virtue of the Act on Food Chain Safety and its official control No XLVI of 2008 that is effective since 1 September 2008 and the Decree of the Minister of Agriculture No 12/2008 (II. 14.) on detailed rules of the protection regarding certain Brucella species. Notification, as well as investigation of cases of abortion is compulsory. In case of abortion or irregular parturition, the veterinarian in charge has to send a set of samples, listed in the decree mentioned above, for further laboratory examination. Until thorough clarification of the case, the animal is kept separated and, if necessary, repeatedly tested.

Results of the investigation

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

2.2.2.2 B. melitensis in animal - Goats

Status as officially free of caprine brucellosis during the reporting year

The entire country free

Ovine and caprine brucellosis (B. melitensis) has been a compulsorily notifiable animal disease in Hungary since 1982. Further to the existing rules laid down in the Zoo-Sanitary Code, the recent legal provisions give the power to the Ministry of Agriculture to introduce any additional measures, should an outbreak of a disease caused by B. melitensis occur in our country. Neither a single clinical case, nor any positive serological or bacteriological test result for B. melitensis has ever occurred in Hungary. The Commission Decision 93/52/EEC recognized Hungary's freedom from the disease.

Monitoring system

Sampling strategy

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

Frequency of the sampling

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

Type of specimen taken

Blood

Methods of sampling (description of sampling techniques)

Blood samples are taken at farm.

Case definition

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

Diagnostic/analytical methods used

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

Vaccination policy

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

Control program/mechanisms

The control program/strategies in place

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

Measures in case of the positive findings or single cases

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

Notification system in place

Ovine and caprine brucellosis (B. melitensis) are compulsorily notifiable by virtue of the Veterinary Act No CLXXVI. of 2005 (which replaced the Veterinary Act No XCI of 1995) and the Zoo-Sanitary Code implemented by the Decree No 41/1997. (V. 28.) FM of the Minister of Agriculture. These legal texts replaced the former regulations, namely Law Decree No 3. of 1981. and Decree No. 28/1981. (XII. 30.) MEM of the Minister of Agriculture and Alimentation, which have contained the same provisions for the diseases mentioned above. Therefore we can declare that ovine and caprine brucellosis is compulsory since 1 January 1982 on the basis of Decree No. 28/1981. (XII. 30.) MEM of the Minister of Agriculture and Alimentation.

Results of the investigation

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

2.2.2.3 B. melitensis in animal - Sheep

Status as officially free of ovine brucellosis during the reporting year

The entire country free

Ovine and caprine brucellosis (B. melitensis) has been a compulsorily notifiable animal disease in Hungary since 1982. Further to the existing rules laid down in the Zoo-Sanitary Code, the recent legal provisions give the power to the Ministry of Agriculture to introduce any additional measures, should an outbreak of a disease caused by B. melitensis occur in our country. Neither a single clinical case, nor any positive serological or bacteriological test result for B. melitensis has ever occurred in Hungary. The Commission Decision 93/52/EEC recognized Hungary's freedom from the disease.

Monitoring system

Sampling strategy

Given, that B. melitensis is not an agent which can be spread under Hungary's geographical and climatic conditions, furthermore no sign of the disease has ever been revealed, there was no scientifically based reason for an extended serological survey. However, between 1997 and 2000 a limited serological screening was carried out and all results were negative. Since 2001 an extended serological survey has been started to demonstrate the B. melitensis free status of Hungary. During 2001, 2002 and 2003 more than 10% of the ovine animals over six months of age were tested serologically for B. melitensis and all results were negative. All ovine animals tested for B. melitensis were negative.

Frequency of the sampling

Approximately 5% of the ovine population were tested.

Type of specimen taken

Blood

Methods of sampling (description of sampling techniques)

Blood samples are taken at farm.

Case definition

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

Diagnostic/analytical methods used

For the diagnostic serological tests of B. melitensis the CFT is used.

Vaccination policy

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

Control program/mechanisms

The control program/strategies in place

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

Measures in case of the positive findings or single cases

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

Notification system in place

Ovine and caprine brucellosis (B. melitensis) are compulsorily notifiable by virtue of the Veterinary Act No CLXXVI. of 2005 (which replaced the Veterinary Act No XCI of 1995) and the Zoo-Sanitary Code implemented by the Decree No 41/1997. (V. 28.) FM of the Minister of Agriculture. These legal texts replaced the former regulations, namely Law Decree No 3. of 1981. and Decree No. 28/1981. (XII. 30.) MEM of the Minister of Agriculture and Alimentation, which have contained the same provisions for the diseases mentioned above. Therefore we can declare that ovine and caprine brucellosis is compulsory since 1 January 1982 on the basis of Decree No. 28/1981. (XII. 30.) MEM of the Minister of Agriculture and Alimentation.

Results of the investigation

No evidence of infection with B. melitensis were found.

3 INFORMATION ON SPECIFIC ZOONOSES AND ZOONOTIC AGENTS

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

3.1 SALMONELLOSIS

3.1.1 General evaluation of the national situation

3.1.1.1 Salmonella - general evaluation

History of the disease and/or infection in the country

In 1992 the Veterinary Science Committee of the Hungarian Academy of Sciences has established its Salmonella Subcommittee with the main aim to support the work of the Hungarian Ministry of Agriculture and Rural Development in the control of Salmonella with regards to poultry flocks. This subcommittee has formed a working group with EU experts to prepare the Integrated Quality Chain System for Salmonella Control in the Hungarian Poultry Sector (Edel-Wray-Nagy et al., 1995). This has been issued by the Ministry for use in the poultry sector and distributed to the County Animal Health and Food Control Stations in 1995. In further years the Salmonella Subcommittee has arranged several courses and lectures to distribute the booklet for wider use. The Basic Document of this Guideline contained the adaptation of Council directive 92/117/EEC. The Guidelines contained general and specific instructions for hatcheries, breeding flocks, broilers, layers, egg packaging plants, slaughterhouses and feedmills. A special chapter was devoted to disinfection and cleaning. Based on the above Guidelines several large Hungarian poultry farming systems (Babolna, Boly, Nadudvar) have built up and started their Salmonella Reduction Programs between 1996 and 2002. Besides, the Salmonella subcommittee has agreed with the Ministry of Agriculture and Rural Development to review the situation and to propose a Hungarian Salmonella Reduction Plan for Hungary, which was published by Nagy et al. in 1997. Directive 92/117/EEC and the basics of the above mentioned Guidelines served the basis for the first ministerial decree [49/2002. (V.24) FVM] on the control of salmonellosis in poultry flocks, which referred to Salmonella Enteritidis and S. Typhimurium in Gallus gallus. The amendment to this Directive [97/2003. (VIII.19) FVM] made the application of the Order compulsory for breeding flocks and hatcheries, and continued to define the above 2 Salmonella serovars to be regarded as Salmonella for the purposes of that decree. The amendment also made the vaccination of table egg producing laying flocks compulsory. After the accession the EC regulations became directly applicable in Hungary as well. From that time EC regulations are followed. The implementation of these regulations is regulated by Decree 180/2009. (XII.29.) of Ministry of Agriculture.

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

Significant decrease could be seen as in the prevalence of salmonella in all types of flocks under scope of national control plans as in meat, meat products, table eggs and egg products of Gallus gallus.

Recent actions taken to control the zoonoses

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

3.1.2 Salmonella in foodstuffs

3.1.2.1 Salmonella spp. in food - Meat from bovine animals

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

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

At meat processing plant

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

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

At meat processing plant

Surface of carcass

At retail

fresh meat and all kinds of meat products

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

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

At meat processing plant

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

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: ISO 6579:2002

At retail

Bacteriological method: ISO 6579:2002

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

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

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

At meat processing plant

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

At retail

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

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

At meat processing plant

minced meat, meat prep., meat products

At retail

minced meat, meat prep., meat products

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

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

At meat processing plant

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

Definition of positive finding

At slaughterhouse and cutting plant

a sample or a batch is positive if salmonella was isolated

At meat processing plant

a sample or a batch is positive if salmonella was isolated

At retail

a sample or a batch is positive if salmonella was isolated

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: ISO 6579:2002

At retail

Bacteriological method: ISO 6579:2002

Preventive measures in place

According to 2073/2005/EC Reg.

Measures in case of the positive findings or single cases

According to Reg.2073/2005/EC.

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

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

3.1.2.3 Salmonella spp. in food - Meat from pig

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

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

At meat processing plant

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

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

At meat processing plant

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

At meat processing plant

Surface of carcass

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 6579:2002

At meat processing plant

Bacteriological method: NMKL No 71:1999

3.2 CAMPYLOBACTERIOSIS

3.2.1 General evaluation of the national situation

3.2.1.1 Thermophilic Campylobacter spp., unspecified - general evaluation

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

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

Recent actions taken to control the zoonoses

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

3.2.2 Campylobacter in foodstuffs

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

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

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

At retail

To be reported via ECDC.

Frequency of the sampling

At slaughterhouse and cutting plant

Sampling distributed evenly throughout the year

Type of specimen taken

At slaughterhouse and cutting plant

Fresh meat

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

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

Definition of positive finding

At slaughterhouse and cutting plant

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

Diagnostic/analytical methods used

At slaughterhouse and cutting plant

Bacteriological method: ISO 10272:1995

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

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

3.3 LISTERIOSIS

3.3.1 General evaluation of the national situation

3.3.1.1 Listeria - general evaluation

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

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

Recent actions taken to control the zoonose	Recent	actions	taken	to	control	the	700nose
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Based on Reg. 2073/2005/EC.

3.3.2 Listeria in foodstuffs

3.3.2.1 Listeria in food

Monitoring system

Sampling strategy

monitoring, objective sampling

Type of specimen taken

At the production plant

RTE

At retail

RTE

Methods of sampling (description of sampling techniques)

At the production plant

single sample

At retail

single sample

Definition of positive finding

At the production plant Listeria monocytogenes is isolated At retail Listeria monocytogenes is isolated Diagnostic/analytical methods used At the production plant ISO 11290-1, ISO 11290-2 At retail ISO 11290-1, ISO 11290-2 3.4 E. COLI INFECTIONS 3.4.1 General evaluation of the national situation 3.4.1.1 Verotoxigenic E. coli (VTEC) - general evaluation Additional information E. coli- microbiological examination of food according to ISO 16654 (E. coli O157)identification by antisera 3.4.2 Escherichia coli, pathogenic in animals

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

Monitoring system

Sampling strategy

Monitoring, Official sampling, objective sampling

Frequency of the sampling

Animals at farm

Sampling distributed evenly throughout the year

Animals at slaughter (herd based approach)

Type of specimen taken

Animals at slaughter (herd based approach)

meat, minced meat

Methods of sampling (description of sampling techniques)

Animals at slaughter (herd based approach)

500 gram meat sample is taken (from one animal), the weight of test portion is 25 grams (cutted from the surface of meat). The samples are examined by ISO 16654:2001 Standard. Immuno-magnetic concentration is used for the detection of the most important serotype O157. If a strain belongig to the O 157 serotype is isolated, the toxin production is detected by a latex based agglutination test.

Case definition

Animals at slaughter (herd based approach)

The sample is considered to be positive if E. coli O157 was isolated, and the strain produces verotoxin (VT-1, VT-2 or both)

Diagnostic/analytical methods used

Animals at slaughter (herd based approach)

Bacteriological method: ISO 16654:2001

3.5 YERSINIOSIS

3.5.1 General evaluation of the national situation

3.5.1.1 Yersinia - general evaluation

Additional information

diagnostic methods: bacteriological examination and PCR

3.6 TRICHINELLOSIS

3.6.1 General evaluation of the national situation

3.6.1.1 Trichinella - general evaluation

History of the disease and/or infection in the country

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

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

Trichinellosis was a significant zoonotic disease in Hungary in the 1950s and 1960s. Due to the introduction of control strategies, the average annual incidence of trichinellosis decreased to 0-0.7 cases per 100,000 for the early 1990s. In the past 15 years, the annual incidence dropped to 0-0.07 cases per 100,000, and no mortality in men caused by the parasite was observed in the same period. The decrease of incidence observed in men is similar to that of prevalence seen in swine at slaughterhouses. Nevertheless, some increasing trends of incidence might be observed in both men and swine in the past years. Trichinella spiralis still persists in the southern and eastern border region of the country. Sporadic Trichinella infections (in average few cases per year) were also detected in wild boars and in less than 1.8% of red foxes. In wild boars, both T. spiralis and Trichinella britovi were detected. In foxes, Trichinella britovi is the dominant species; nevertheless, Trichinella spiralis and Trichinella pseudospiralis were also reported from this species.

Recent	actions	taken	to	control	the	zoonoses

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

Suggestions to the European Union for the actions to be taken

3.6.2 Trichinella in animals

3.6.2.1 Trichinella in animal - Solipeds, domestic - horses

Monitoring system

Sampling strategy

Frequency of the sampling

Type of specimen taken

Methods of sampling (description of sampling techniques)

Case definition

Diagnostic/analytical methods used

Measures in case of the positive findings or single cases

Results of the investigation including the origin of the positive animals

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

3.6.2.2 Trichinella spp., unspecified in animal - Pigs

Monitoring system

Sampling strategy

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

Frequency of the sampling

Every slaughtered animal is sampled

Type of specimen taken

Diaphragm muscle

Methods of sampling (description of sampling techniques)

Methods specified in Regulation 2075/2005/EC

Case definition

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

Diagnostic/analytical methods used

Artificial digestion method of collective samples.

Vaccination policy

None.

Control program/mechanisms

The control program/strategies in place

See above.

Measures in case of the positive findings or single cases

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

Results of the investigation

All slaughtered swine are investigated. There was no positive finding for Trichinella.

3.6.2.3 Trichinella spp., unspecified in animal - Solipeds, domestic - horses

Monitoring system

Sampling strategy

Trichinella testing is mandatory, all animal is sampled.

Frequency of the sampling
Every slaughtered animal is sampled
Type of specimen taken
Diaphragm muscle
Methods of sampling (description of sampling techniques)
2075/2005/EC regulation
Case definition
Animal with one or more Trichinella larva in the official examination
Diagnostic/analytical methods used
Artificial digestion method of collective samples
Vaccination policy
None.
Measures in case of the positive findings or single cases
Positive cases are considered not to be eligible for human consumption.
Results of the investigation
All the slaughtered horses (as all other susceptible animals) are investigated. There was no positive finding for trichinella.
National evaluation of the recent situation, the trends and sources of infection
Trichinella infection has never been detected in horses in Hungary.
3.6.2.4 Trichinella in animal - Pigs
Monitoring system
Sampling strategy
General
Frequency of the sampling
Type of specimen taken
Methods of sampling (description of sampling techniques)

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Diagnostic/analytical methods used

Control program/mechanisms

The control program/strategies in place

Measures in case of the positive findings or single cases

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

3.7 ECHINOCOCCOSIS

3.7.1 General evaluation of the national situation

3.7.1.1 Echinococcus - general evaluation

History of the disease and/or infection in the country

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

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

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

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

Recent actions taken to control the zoonoses

3.8 RABIES

3.8.1 General evaluation of the national situation

3.8.1.1 Lyssavirus (rabies) - general evaluation

History of the disease and/or infection in the country

At the beginning of the twentieth century, rabies predominantly occurred in Hungary in its urban form and was transmitted to humans mainly by dogs. Therefore, in the 1930's strict animal health regulations were introduced, the main elements of these remained unchanged till recent days. These measures included nationwide mandatory regular vaccination of dogs over three months of age. During World War II, epidemiological actions were hindered, which resulted in a re-emergence of urban rabies in 1946-47. The re-introduction of regulatory measures as well as mandatory preventive vaccination, urban rabies seems to be sporadic in Hungary. The register of the annual vaccination of dogs show that around 1.5 Million of dogs are vaccinated every year. In recent days, together with the disappearing of rabies from dogs, rabies in cats is considered to be of high importance. Preventive vaccination of cats against rabies is recommended but not mandatory and special epidemiological aspects are to be considered. (The movement of animals is hard to control and there is a relative large number of semi-wild living animals of this species.) Sylvatic rabies reached the North-Eastern part of Hungary in the year 1954. Until 1966 cases remained sporadic (a total of 97 foxes, 16 badgers and wild cats confirmed positive for rabies). In the same timeframe, 35 dogs and 96 domestic cats were confirmed positive for the disease. In 1967, sylvatic rabies crossed the Danube and by 1971 the whole country was infected. At this time, intensive attempts were executed in order to lower the number of foxes, with minimum results. These actions were suspended in 1987. Between 1988 and 1996 around 1000 rabies cases in foxes were diagnosed per year. Oral vaccination of foxes was introduced in Hungary in 1992. From that year, the rabies cases in foxes decreased year by year, as the vaccination zone was extended from the western part of the country to the whole territory of Hungary. From 1988, rabies cases in foxes decreased by 90%. The efficacy of the oral immunization of foxes can be demonstrated by the considerable decrease of rabies cases in the country. During the recent years the number of the detected positive cases remained under ten cases. In the calendar years 2005 only 9, in 2006 only 3, in 2007 only 4, in 2008 only 7 and in 2009 only 2 positive cases could be detected for the whole territory of the country. In 2010 fox rabies cases happened in Hungary: from this 6 cases in county Csongrd (close to the border of the country) and 1 dog in the same county, 1 case in county Hajd-Bihar, 2 cases in county Szabolcs-Szatmr-Bereg. In 2011 two(2) rabies cases in bats were proved. In 2012 one (1) rabies case was confirmed

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

After a period of lack of rabies cases, in the autumn of 2013 24 cases were diagnosed, mainly in foxes. Therefore the oral vaccination of foxes is continued in a definied part of the country.

Recent actions taken to control the zoonoses

In order to eradicate rabies from Hungary and to protect public health, regulatory measures on domestic animals are in place. Regular preventive vaccination of dogs is mandatory two times between 3 months of age and under 1 year of age with monovalent vaccine. Later repeated annually. Stray dogs are removed from public areas and are vaccinated against the disease. Oral vaccination of foxes is done in a part of Hungary's territory.

3.8.2 Lyssavirus (rabies) in animals

3.8.2.1 Lyssavirus (rabies) in animal - Dogs

Vaccination policy

Obligatory vaccination of dogs, once a year.

Measures in case of the positive findings or single cases

There were no positive cases since 2010 (in dogs) .

Notification system in place

Notifiable disease.

3.9 Q-FEVER

3.9.1 General evaluation of the national situation

3.9.1.1 Coxiella (Q-fever) - general evaluation

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

In May 2013 a human Q fever epidemic occurred in Baranya county. The investigation carried out in cooperation of the human and animal health authorities identified as possible source of the disease a sheep farm. During the investigation 1379 tests were carried out from samples taken in sheep, goat and cattle farms in the area around the farm. 72 bovine, 1 caprine and 34 ovine samples were positive.

Additional information

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

3.10 WEST NILE VIRUS INFECTIONS

3.10.1 West Nile Virus in animals

3.10.1.1 West Nile Virus in animal

Vaccination policy

In case of equine animals vaccination for West Nile Virus is on a voluntary basis.

Notification system in place

In case of animals West Nile Virus is not a notifiable disease.

Additional information

In 2004 goshawks in Hungary (Accipiter gentilis) showed symptoms of lethal encephalitis. West Nile virus nucleic acid and antigens were detected in the brain of the animals. The complete genome analysis indicated that the strain belonged to the lineage 2 of WNV. The same lineage was detected in 2005 in four goshawks and one sparrowhawk. Furthermore in 2007 the virus was detected in geese and in red-footed falcons as well. The first human case was confirmed in 2008.

4 ANTIMICROBIAL RESISTANCE INFORMATION ON SPECIFIC ZOONOSES AND ZOONOTIC AGENTS

4.1 SALMONELLOSIS

4.1.1 Salmonella in foodstuffs

4.1.1.1 Antimicrobial resistance in Salmonella Meat from poultry, unspecified

Sampling strategy used in monitoring

Frequency of the sampling

Frequency: as described previously in prevalence tables. As only Salmonella Enteritidis and Typhimurium strains are involved in the resistence monitoring program in foodstuff, and the number of isolates belonging to these serovars is very limited because of the 90% dominance of Salmonella Infantis in broiler chicken, only a limited number of isolates are available for the tests.

Type of specimen taken

Fresh meat at slaughterhouses, minced meat, meat preparations, meat products at processing level and at the market. There is no direct sampling program for antimicrobial resistance, it is connected to prevalence monitoring.

Methods of sampling (description of sampling techniques)

As described earlier.

Procedures for the selection of isolates for antimicrobial testing

S. Enteritidis and Salmonella Infantis strains are selected. All the S. Enteritidis strains of broiler origin were tested. As S. Infantis shows a characteristic dominance in Hungary, the number of the strains available is just 2000. Therefore only 10 % of the isolates were selected for testing.

Methods used for collecting data

All the strains isolated from food are serotyped in the NRL Salmonella. Antimicrobial resistence testing is performed in the NRL.

Laboratory methodology used for identification of the microbial isolates

ISO 6579 - isolation, biochemical and serological confirmation.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Disc diffusion method according to NCCLS is used. The inhibitive zone diameters are measured by a computerised system.

Preventive measures in place

There are no specific preventive measures in place.

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

Because of the very low number of Salmonella Enteritidis isolates the information available is limited. There is no significant change in level of resistance in the past four years.

4.1.2 Salmonella in animals

4.1.2.1 Antimicrobial resistance in Salmonella Poultry, unspecified

Sampling strategy used in monitoring

Methods used for collecting data

Testing and data collection was the task of the NRL Salmonella.

Laboratory methodology used for identification of the microbial isolates

ISO 6579 - isolation, biochemical and serological confirmation. ISO 6579 - isolation, biochemical and serological confirmation.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

Disc diffusion method according to NCCLS is used. The inhibitive zone diameters are measured by a computerised system.

Results of the investigation

4.2 CAMPYLOBACTERIOSIS

4.2.1 Campylobacter in foodstuffs

4.2.1.1 Antimicrobial resistance in Campylobacter jejuni and coli in foodstuff derived from Meat from poultry, unspecified

Sampling strategy used in monitoring

Frequency of the sampling

Isolates derive from monitoring system performed for measurement of prevalence of campylobacters in fresh poultry meat. The sampling is random, performed by the regional competent authorities. The samples are taken in slaughterhouses, and is a part of a permanent monitoring scheme.

Type of specimen taken

500 grams of fresh poultry meat.

Procedures for the selection of isolates for antimicrobial testing

Almost every isolated strains are tested.

Methods used for collecting data

All the tests are performed by the NRL.

Laboratory methodology used for identification of the microbial isolates

Disc diffusion method on horseblood agar plates. Control strains are used.

5 INFORMATION ON SPECIFIC MICROBIOLOGICAL AGENTS

5.1 STAPHYLOCOCCAL ENTEROTOXINS

5.1.1 Staphylococcal enterotoxins in foodstuffs

5.1.1.1 Staphylococcal enterotoxins in food

Monitoring system

Sampling strategy

There is no direct sampling strategy, samples containing more than 100.000 coagulase positive staphyloccocci/gram are tested for the presence of enterotoxin. Only those product groups are routinely tested for coagulase positive staphyloccocci, for which there is a criterion in 2073/2005/EC.

Type of specimen taken

milk products, in case of supposed human cases other food as meat products, prepared dishes are sampled

Definition of positive finding

If ELFA test shows a positive result, the product is considered to be positive.

Diagnostic/analytical methods used

Validated detection method of the EU-RL based on VIDAS enterotoxin test is used.

Measures in case of the positive findings or single cases

products are withdrawn from the market.

6 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.

6.1 Outbreaks

6.1.1 Foodborne outbreaks

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

Data on foodborne outbreaks have been collected in Hungary by legal background at the Public Health Authority since 1931. There are two surveillance systems in Hungary since 1st January 2007. One of them is for collection of communicable diseases included the human data of foodborne outbreaks (based on the obligatory reports of a physician and microbiological laboratories). The reporting system of human cases belongs to the institutes of the National Public Health and Medical Officers Service (National Center for Epidemiologie = NCE and National Institute for Food and Nutrition Science = NIFNS). The other surveillance system is operated by the Central Agricultural Office, (since 15 March 2012 its name is National Food Chain Safety Office = NFCSO), which is working under the supervision of Ministry of Agriculture. This system based on the reports of the food business operators, the drinking water suppliers and the data of the communicable disease reporting system. The role of the NFCSO is in this topic to investigate which food was the sourse of the outbreaks, collection and analysis of obtained data in all events if the outbreak was general or the supposed product is produced by the food industry and/or catering, and not located to a household. The household outbreaks are investigated by the Public Health Authority. The investigation of an outbreak is usually initiated with the information about the human cases provided by the public health service. The two authorities cooperate in the whole process of investigation.

Description of the types of outbreaks covered by the reporting:

Outbreak: At least two cases with epidemiological link (exposed by the same food). Household outbreak: At least two related cases in the same household. General outbreak: At least two related cases in a community (school, kindergarten, hospital, events etc.).

National evaluation of the reported outbreaks in the country:

Trends in numbers of outbreaks and numbers of human cases involved

The epidemiological investigation was carred out by Public Health Services. If it has been suspected the outbreake was foodborne, the investigation at the food chain was conducted by National Food Chain Safety Office. The number of food-borne outbreaks registrated by National Food Chain Safety Office was more than in 2013 and the number of human cases increased compared to the year prior. In 2014 there were 34 general food-borne events, there were 1709 human cases. The proportion of causative agents: 32,4 % (11) of the outbreaks were caused by Salmonella enteritidis, 2,9 % (1) Salmonella typhimurium, 17,6 % (6) Norovirus, 5,9 % (2) Clostridium botulinum, 5,9 % (2) Staphylococcus aureus, 5,9 % (2) Campylobacter spp., 2,9 % (1) Coxiella burnetii, 8,8 % (3) high microbial count and 17,6 % (6) outbreaks had unknown etiology. The proportion of Salmonella etiology have increased compared to 2013 (2014: 35,3 %, 2013: 26,9%). There was no major change in the type of food vehicles. The most food-borne outbreaks (35,3 %) were caused by mixed foods. The number of cases caused by broiler meats and products thereof, increased. There was the same number of cases caused by bovine meat and products thereof. In 2013 only one but in 2014 5 events were caused by egg products and confectionery products. Consumption of milk and dairy products caused 4 general food-borne events. The number of cases caused by cereal products, vegetables and products thereof, increased. Clostridium botulinum contamination of chickpeas, which is the raw material of falafel, caused one human illnes and consumption of pasta which was contaminated by conditionally pathogenic bacteria caused 2 food-borne events. The most food-borne events occurred in public canteens but the number of events decreased compared to 2013 (2014: 50 %, 2013: 57,7 %). 35,3 % of the outbreaks occured in catering services (restaurants, bars, cafe's, etc.) and the number of cases decreased compared to the year prior. We registered 1 outbreak which was caused by the food industry and 4 events were caused by small producers' products. 6 human botulism cases were caused by a small producers' truffle pesto.

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

ANIMAL POPULATION TABLES

Table Susceptible animal population

		Population
Animal species	Category of animals	animal
Cattle (bovine animals)	Cattle (bovine animals) (not specified)	891,661
Goats	Goats (not specified)	22,405
Pigs	Pigs (not specified)	1,854,596
Poultry, unspecified	Poultry, unspecified	38,800,100
Rabbits	Rabbits (not specified)	1,157,900
Sheep	Sheep (not specified)	951,418
Solipeds, domestic	Solipeds, domestic (not specified)	61,100

DISEASE STATUS TABLES

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

Region	Total number of herds	Number of infected herds	Number of herds with status officially free	ns of suspect cases	micriobiolo gy under investigatio ns of suspect cases	ns of suspect cases	suspended herds under investigatio ns of suspect cases	investigatio ns of suspect cases		Number of animals tested under surveillance		Total number of animals
Magyarorszag	7,967	0	7,967	0						,-		954,619
Kozep- Magyarorszag	,	0	284	0		0	0	0	0	_,,,,		52,497
Fejer	367	0	367	0	0	0	0	0	0	1,940	35	36,823
Komarom- Esztergom	83	0	83	0	0	0	0	0	0	388	18	8,375
Veszprem	152	0	152	0	0	0	0	0	0	2,006	94	40,941
Gyor-Moson- Sopron	91	0	91	0	0	0	0	0	0	354	14	6,988
Vas	122	0	122	0	0	0	0	0	0	115	6	2,307
Zala	99	0	99	0	0	0	0	0	0	448	13	8,879
Baranya	58	0	58	0	0	0	0	0	0	1,242	51	24,481
Somogy	242	0	242	0	0	0	0	0	0	1,044	19	20,862
Tolna	104	0	104	0	0	0	0	0	0	1,570	60	31,394
Borsod-Abauj- Zemplen	343	0	343	0	0	0	0	0	0	2,525	150	50,543
Heves	243	0	243	0	0	0	0	0	0	786	65	15,816
Nograd	313	0	313	0	0	0	0	0	0	775	44	15,764
Hajdu-Bihar	1,317	0	1,317	0	0	0	0	0	0	10,002	327	199,720
Jasz-Nagykun- Szolnok	695	0	695	0	0	0	0	0	0	2,378	75	49,125
Szabolcs- Szatmar-Bereg	645	0	645	0	0	0	0	0	0	7,363	645	145,605
Bacs-Kiskun	1,297	0	1,297	0	0	0	0	0	0	8,108	275	159,963
Bekes	878	0	878	0	0	0	0	0	0	2,171	127	43,401
Csongrad	634	0	634	0	0	0	0	0	0	2,051	128	41,135

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

Region	Total number of herds	Number of infected herds	Number of herds with status officially free	Number of animals positive in microbiolog ical testing under investigation as of suspect cases	micriobiolo gy under	animals positive to BST under	e animals under	suspended herds under		Number of abortions due to Brucella abortus	Number of isolations of Brucella infections	Number of notified abortions whatever cause		pools tested under surveillance		Number of infected herds tested under surveillance	Number of animals tested under surveillance		Total number of animals
Magyarorszag	16,419	C	16,389) 0	0	0	0	0	0	0	0	917	0	11,352	139	0	393,807	12,150	891,661
Budapest	26	C) 26	0	0	0	0	0	0	0	0	0	0	0	0	0	520	4	1,076
Pest	1,287	C	1,287	' 0	0	0	0	0	0	0	0	39	0	3,383	6	0	23,537	777	59,757
Fejer	463	C	463	3 0	0	0	0	0	0	0	0	30	0	1,908	4	0	21,623	225	51,145
Komarom- Esztergom	287	C	287	' 0	0	C	C	0	0	0	0	27	0	2,335	2	0	6,931	188	15,653
Veszprem	511	C	511	0	0	0	0	0	0	0	0	54	0	0	0	0	27,286	370	46,564
Gyor-Moson- Sopron	844	C	844	0	0	C	C	0	0	0	0	110	0	1,098	4	0	24,196	832	56,657
Vas	580	C	580) 0	0	0	0	0	0	0	0	25	0	0	0	0	15,120	409	29,798
Zala	505	C	502	2 0	0	0	0	0	0	0	0	1	0	0	0	0	8,998	389	26,382
Baranya	419	C	419	0	0	0	0	0	0	0	0	17	0	0	0	0	14,081	275	32,426
Somogy	559	C	532	2 0	0	C	C	0	0	0	0	32	0	0	0	0	17,629	454	38,529
Tolna	491	C	491	0	0	C	C	0	0	0	0	20	0	1,218	10	0	8,944	293	27,769
Borsod-Abauj- Zemplen	860	C	860	0	0	0	0	0	0	0	0	61	0	0	0	0	25,717	732	50,007
Heves	341	C	341	0	0	0	0	0	0	0	0	24	0	0	0	0	9,317	338	16,922
Nograd	335	C	335	5 0	0	, C	, C	0	0	0	0	4	0	0	0	0	10,596	152	19,554
Hajdu-Bihar	2,324	C	2,324	0	0	C	C	0	0	0	0	116	0	0	0	0	54,727	2,053	110,199
Jasz-Nagykun- Szolnok	1,053	C	1,053	3 0	0	0	0	0	0	0	0	46	0	0	0	0	26,641	776	64,003
Szabolcs- Szatmar-Bereg	1,006	С	1,006	0	0	C	C	0	0	0	0	37	0	0	0	0	22,466	892	46,680
Bacs-Kiskun	1,745	C	1,745	5 0	0	C	C	0	0	0	0	29	0	1,410	113	0	32,699	1,665	83,276
Bekes	1,537	C	1,537	0	0	C	C	0	0	0	0	241	0	0	0	0	26,939	534	69,833
Csongrad	1,246	C	1,246	5 0	0	C	C	0	0	0	0	4	0	0	0	0	15,840	792	45,431

DISEASE STATUS TABLES

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

Region	Total number of herds	Number of infected herds	Number of herds with status officially free	Number of animals detected positive in bacteriological examination	Number of animals with suspicious lesions of tuberculosis examined and submitted to histopathological and bacteriological examinations	Number of tuberculin tests carried out before	Number of animals tested with tuberculin routine testing	Interval between routine tuberculin tests	Total number of animals
Magyarorszag	16,419	3	16,409	25	429	89,282	794,137	1	891,661

PREVALENCE TABLES

Table CAMPYLOBACTER in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit		Total units positive	Zoonoses	N of units positive
Magyarorszag	Gallus gallus (fowl) - broilers - Slaughterhouse - Hungary Monitoring - Official sampling - Selective sampling	herd/floc	465	358	Campylobacter - C. jejuni	157
		k			Campylobacter - Campylobacter spp., unspecified	201
	Turkeys - fattening flocks - Slaughterhouse - Hungary Monitoring - Official sampling - Selective sampling	herd/floc	412	260	Campylobacter - C. jejuni	91
		k			Campylobacter - Campylobacter spp., unspecified	169

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
Magyarorszag	Meat from bovine animals - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	94	1	Campylobacter - C. coli	1
	sampling - Objective sampling						Campylobacter - C. jejuni	0
							Campylobacter - C. lari	0
							Campylobacter - C. upsaliensis	0
							Campylobacter - Thermophilic Campylobacter spp., unspecified	0
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	322	86	Campylobacter - C. coli	49
	sampling - Objective sampling						Campylobacter - C. jejuni	23
							Campylobacter - C. lari	0
							Campylobacter - C. upsaliensis	0
							Campylobacter - Thermophilic Campylobacter spp., unspecified	14
	Meat from broilers (Gallus gallus) - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	240	54	Campylobacter - C. coli	40
	Objective sampling	· ·					Campylobacter - C. jejuni	4
							Campylobacter - C. lari	0
							Campylobacter - C. upsaliensis	0
							Campylobacter - Thermophilic Campylobacter spp., unspecified	10
	Meat from duck - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	72	10	Campylobacter - C. coli	5
	sampling						Campylobacter - C. jejuni	1
							Campylobacter - C. lari	0
							Campylobacter - C. upsaliensis	0
							Campylobacter - Thermophilic Campylobacter spp., unspecified	4
	Meat from geese - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	40	7	Campylobacter - C. coli	3
	sampling						Campylobacter - C. jejuni	2
							Campylobacter - C. lari	0
							Campylobacter - C. upsaliensis	0
							Campylobacter - Thermophilic Campylobacter spp., unspecified	2
	Meat from pig - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	268	7	Campylobacter - C. coli	6
	Objective sampling						Campylobacter - C. jejuni	1
							Campylobacter - C. lari	0
							Campylobacter - C. upsaliensis	0
						Campylobacter - Ther Campylobacter spp., unspecified		0
	Meat from turkey - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	239	34	·	23
	sampling					Campylobacter - C. jejuni	6	
							Campylobacter - C. lari Campylobacter - C. upsaliensis	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	Zoonoses	N of units positive
Magyarorszag	Meat from turkey - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective sampling	single	25	Gram	239	34	Campylobacter - Thermophilic Campylobacter spp., unspecified	5
	Milk, cows' - raw milk - Retail - Hungary - food sample - milk - Surveillance - Official sampling - Objective sampling	single	25	Millilitre	171	0	Campylobacter - C. coli	0
							Campylobacter - C. jejuni	0
							Campylobacter - C. lari	0
							Campylobacter - C. upsaliensis	0
							Campylobacter - Thermophilic Campylobacter spp., unspecified	0

Table COXIELLA (Q-FEVER) 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
Magyarorszag	All animals - zoo animals - Zoo - Hungary - animal sample - blood - Clinical investigations - Industry sampling - Not specified	animal	2	0	0	Coxiella (Q-fever)	0
	Cattle (bovine animals) - Farm (not specified) - Hungary - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	552	39	0	Coxiella (Q-fever)	39
	Cattle (bovine animals) - Farm (not specified) - Hungary - animal sample - faeces - Clinical investigations - Industry sampling - Suspect sampling	animal	43	0	0	Coxiella (Q-fever)	0
	Cattle (bovine animals) - Farm (not specified) - Hungary - animal sample - foetus/stillbirth - Clinical investigations - Industry sampling - Suspect sampling	animal	3	3	1	Coxiella (Q-fever)	3
	Cattle (bovine animals) - Farm (not specified) - Hungary - animal sample - milk - Clinical investigations - Industry sampling - Suspect sampling	animal	102	5	0	Coxiella (Q-fever)	5
	Goats - Farm (not specified) - Hungary - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	59	0	0	Coxiella (Q-fever)	0
	Sheep - Farm (not specified) - Hungary - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	40	1	0	Coxiella (Q-fever)	1
	Sheep - Farm (not specified) - Hungary - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	0	Coxiella (Q-fever)	1
	Sheep - Farm (not specified) - Hungary - animal sample - foetus/stillbirth - Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	1	Coxiella (Q-fever)	1

Table CRONOBACTER in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	•	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Infant formula - dried - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	10	Gram	121	0	Cronobacter - Cronobacter sakazakii	0
							Cronobacter - Cronobacter spp., unspecified	0

Table ECHINOCOCCUS in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit		Total units positive	Zoonoses	N of units positive
Magyarorszag	Foxes - wild - Hunting - Hungary Monitoring - Industry sampling - Objective sampling	animal	334	33	Echinococcus - E. multilocularis	33
					Echinococcus - Echinococcus spp., unspecified	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Fruits and vegetables - pre-cut - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	24	0	Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC non-O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC 0157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC, unspecified	0
	Meat from bovine animals - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling - Objective sampling	single	25	Gram	72	0	Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC non-O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC, unspecified	0
	Meat from bovine animals - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	18	0	Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC non-O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC 0157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC, unspecified	0
	Meat from bovine animals - minced meat - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	17	0	Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC non-O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC, unspecified	0
	Seeds, sprouted - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	47	0	Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC non-O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC 0157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC, unspecified	0
	Vegetables - pre-cut - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	101	0	Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC non-O157	0
							Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC 0157	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit		Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Vegetables - pre-cut - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	101	0	Escherichia coli, pathogenic - Verotoxigenic E. coli (VTEC) - VTEC, unspecified	0

Table LISTERIA in animal

			Total	Total		
		Sampling	units	units		N of units
Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	unit	tested	positive	Zoonoses	positive
Magyarorszag	Cattle (bovine animals) - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Listeria	1
	Sheep - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	18	10	Listeria	10

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Magyarorszag	Bakery products - cakes - Catering (not specified) - Hungary - food sample (not specified) -	single	25	Gram	140	3	>100	Listeria - L. monocytogenes	0	0
	Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Bakery products - cakes - Catering (not specified) - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	140	3	detection	Listeria - L. monocytogenes	140	3
	Bakery products - cakes - Retail - Hungary - food sample (not specified) - Surveillance -	single	25	Gram	128	0	>100	Listeria - L. monocytogenes	0 140 0 0 0 128 0 0 0 31 0 0 135 0 0 0 78 0 0 17 0 0 0 82 0 0 70 0 83 0 0 40	0
	Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Bakery products - cakes - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	128	0	detection	Listeria - L. monocytogenes	128	0
	Cheeses made from sheep's milk - soft and semi-soft - Retail - Hungary - food sample (not	single	25	Gram	31	0	>100	Listeria - L. monocytogenes	0	0
	specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Cheeses made from sheep's milk - soft and semi-soft - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	31	0	detection	Listeria - L. monocytogenes	31	0
	Chocolate - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	135	0	>100	Listeria - L. monocytogenes	0	0
	Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Chocolate - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	135	0	detection	Listeria - L. monocytogenes	135	0
	Cocoa and cocoa preparations, coffee and tea - Retail - Hungary - food sample (not specified)	single	25	Gram	78	0	>100	Listeria - L. monocytogenes	0	0
	- Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Cocoa and cocoa preparations, coffee and tea - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	78	0	detection	Listeria - L. monocytogenes	78	0
	Dairy products (excluding cheeses) - dairy desserts - Processing plant - Hungary - food	single	25	Gram	17	0	>100	Listeria - L. monocytogenes	0	0
	sample (not specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	98 31 98 0 98 0 98 0 98 0 98 0 98 0 98 0 98 0	0
	Dairy products (excluding cheeses) - dairy desserts - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	17	0	detection	Listeria - L. monocytogenes	17	0
	Dairy products (excluding cheeses) - dairy desserts - Retail - Hungary - food sample (not	single	25	Gram	82	0	>100	Listeria - L. monocytogenes	0	0
	specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Dairy products (excluding cheeses) - dairy desserts - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	82	0	detection	Listeria - L. monocytogenes	82	0
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Hungary -	single	25	Gram	70	0	>100	Listeria - L. monocytogenes	0	0
	food sample (not specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	70	0	detection	Listeria - L. monocytogenes	70	0
	Dairy products (excluding cheeses) - fermented dairy products - Retail - Hungary - food	single	25	Gram	83	0	>100	Listeria - L. monocytogenes	0	0
	sample (not specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Dairy products (excluding cheeses) - fermented dairy products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	83	0	detection	Listeria - L. monocytogenes	83	0
	Dairy products (excluding cheeses) - ice-cream - Catering (not specified) - Hungary - food	single	25	Gram	40	0	>100	Listeria - L. monocytogenes	0	0
	sample (not specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Dairy products (excluding cheeses) - ice-cream - Catering (not specified) - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	40	0	detection	Listeria - L. monocytogenes	40	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Hungary - food sample (not	single	25	Gram	205	0	>100	Listeria - L. monocytogenes	0	0
	specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	205	0	detection	Listeria - L. monocytogenes	205	0
	Fish - smoked - Retail - Hungary - food sample (not specified) - Surveillance - Official	single	25	Gram	164	13	>100	Listeria - L. monocytogenes	13	1
	sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	13	12

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
Magyarorszag	Fish - smoked - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	164	13	detection	Listeria - L. monocytogenes	151	0
	Infant formula - Retail - Hungary - food sample (not specified) - Surveillance - Official	single	25	Gram	226	0	>100	Listeria - L. monocytogenes	0	0
	sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Infant formula - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	226	0	detection	Listeria - L. monocytogenes	226	0
	Meat from bovine animals - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	9	0	>100	Listeria - L. monocytogenes	0	0
								, ,	0	0
	Meat from bovine animals - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	9			Listeria - L. monocytogenes	9	0
	Meat from bovine animals - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	50	0	0	0		
								, ,	0	0
	Meat from bovine animals - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	50	0	detection	Listeria - L. monocytogenes	50	0
	Meat from broilers (Gallus gallus) - meat products - Processing plant - Hungary - food sample	single	25	Gram	73	0	>100	Listeria - L. monocytogenes	0	0
	(not specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Meat from broilers (Gallus gallus) - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	73	0	detection	Listeria - L. monocytogenes	73	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Hungary - food sample (not	single	25	Gram	97	1	>100	Listeria - L. monocytogenes	0	0
	specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	97	1	detection	Listeria - L. monocytogenes	97	1
	Meat from pig - meat products - Processing plant - Hungary - food sample (not specified) -	single	25	Gram	25	0	>100	Listeria - L. monocytogenes	0	0
	Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Meat from pig - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	25	0	detection	Listeria - L. monocytogenes	25	0
	Meat from pig - meat products - Retail - Hungary - food sample (not specified) - Surveillance -	single	25	Gram	69	2	>100	Listeria - L. monocytogenes	0	0
	Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Meat from pig - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	69	2	detection	Listeria - L. monocytogenes	69	2
	Meat from turkey - meat products - Processing plant - Hungary - food sample (not specified) -	single	25	Gram	15	1	>100	Listeria - L. monocytogenes	0	0
	Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Meat from turkey - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	15	1	detection	Listeria - L. monocytogenes	15	1
	Meat from turkey - meat products - Retail - Hungary - food sample (not specified) -	single	25	Gram	16	0	>100	Listeria - L. monocytogenes	0	0
	Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Meat from turkey - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	16	0	detection	Listeria - L. monocytogenes	16	0
	Milk, cows' - raw milk - Retail - Hungary - food sample - milk - Surveillance - Official sampling	single	25	Millilitre	158	1	>100	Listeria - L. monocytogenes	0	0
	- Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Milk, cows' - raw milk - Retail - Hungary - food sample - milk - Surveillance - Official sampling - Objective sampling	single	25	Millilitre	158	1	detection	Listeria - L. monocytogenes	158	1
	Other processed food products and prepared dishes - meat based dishes - Catering (not	single	25	Gram	176	3	>100	Listeria - L. monocytogenes	0	0
	specified) - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
-	Other processed food products and prepared dishes - meat based dishes - Catering (not specified) - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	176	3	detection	Listeria - L. monocytogenes	176	3
	Other processed food products and prepared dishes - meat based dishes - Retail - Hungary -	single	25	Gram	45	0	>100	Listeria - L. monocytogenes	0	0
	food sample (not specified) - Surveillance - Official sampling - Objective sampling	,					<= 100	Listeria - L. monocytogenes	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
Magyarorszag	Other processed food products and prepared dishes - meat based dishes - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	45	0	detection	Listeria - L. monocytogenes	45	0
	Other processed food products and prepared dishes - sandwiches - Retail - Hungary - food	single	25	Gram	129	4	>100	Listeria - L. monocytogenes	1	0
	sample (not specified) - Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	1	1
	Other processed food products and prepared dishes - sandwiches - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	129	4	detection	Listeria - L. monocytogenes	128	3
	Ready-to-eat salads - Catering (not specified) - Hungary - food sample (not specified) -	single	25	Gram	124	1	>100	Listeria - L. monocytogenes	0	0
	Surveillance - Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Ready-to-eat salads - Catering (not specified) - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	124	1	detection	Listeria - L. monocytogenes	124	1
	Ready-to-eat salads - Retail - Hungary - food sample (not specified) - Surveillance - Official	single	25	Gram	219	0	>100	Listeria - L. monocytogenes	0	0
	sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Ready-to-eat salads - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	219	0	detection	Listeria - L. monocytogenes	219	0
	Seeds, sprouted - ready-to-eat - Retail - Hungary - food sample (not specified) - Surveillance -	single	25	Gram	55	0	>100	Listeria - L. monocytogenes	0	0
	Official sampling - Objective sampling						<= 100	Listeria - L. monocytogenes	0	0
	Seeds, sprouted - ready-to-eat - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	55	0	detection	Listeria - L. monocytogenes	55	0
V	Vegetables - pre-cut - Retail - Hungary - food sample (not specified) - Surveillance - Official	single	25	Gram	160	17	>100	Listeria - L. monocytogenes	1	0
	sampling - Objective sampling				<= 100	Listeria - L. monocytogenes	1	1		
	Vegetables - pre-cut - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	160	17	detection	Listeria - L. monocytogenes	159	16

Table LYSSAVIRUS (RABIES) in animal

		Sampling	Total	Total units		N of units
Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	unit			Zoonoses	positive
Magyarorszag	Bats - wild - Natural habitat - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	6	0	Lyssavirus (rabies)	0
	Bats - zoo animal - Zoo - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	3	0	Lyssavirus (rabies)	0
	Cats - Veterinary clinics - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	390	0	Lyssavirus (rabies)	0
	Cattle (bovine animals) - Farm (not specified) - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	33	0	Lyssavirus (rabies)	0
	Deer - wild - Hunting - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	29	1	Lyssavirus (rabies)	1
	Dogs - Veterinary clinics - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	235	1	Lyssavirus (rabies)	1
	Foxes - wild - Hunting - Hungary Monitoring - active - Industry sampling - Objective sampling	animal	2522	0	Lyssavirus (rabies)	0
	Foxes - wild - Natural habitat - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	1408	20	Lyssavirus (rabies)	20
	Goats - Farm (not specified) - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	11	1	Lyssavirus (rabies)	1
	Jackals - wild - Hunting - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	52	0	Lyssavirus (rabies)	0
	Sheep - Farm (not specified) - Hungary Monitoring - passive - Industry sampling - Suspect sampling	animal	32	0	Lyssavirus (rabies)	0

ea 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
1agyarorszag	All animals - zoo animals - Zoo - Hungary - animal sample - nasal swab - Clinical investigations - Industry sampling - Not specified	animal	2	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Alpacas - zoo animals - Zoo - Hungary - animal sample - organ/tissue - Clinical investigations - Industry sampling - Not specified	animal	1	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Badgers - wild - Hunting - Hungary - animal sample - lymph nodes - Monitoring - active - Official sampling - Convenient sampling	animal	1	1	Mycobacterium - M. avium complex	1
	Cattle (bovine animals) - Slaughterhouse - Hungary Clinical investigations - Official sampling - Not specified	animal	429	103	Mycobacterium - M. avium complex	1
					Mycobacterium - M. avium complex - M. avium subsp. hominissuis	7
					Mycobacterium - M. avium complex - M. avium subsp. paratuberculosis	40
					Mycobacterium - M. caprae	24
					Mycobacterium - Mycobacterium spp., unspecified	31
	Cattle (bovine animals) - Slaughterhouse - Hungary - animal sample - lymph nodes - Monitoring - active - Official sampling - Objective sampling	animal	90	10	Mycobacterium - M. avium complex - M. avium subsp. hominissuis	1
					Mycobacterium - M. avium complex - M. avium subsp. paratuberculosis	7
					Mycobacterium - Mycobacterium spp., unspecified	2
	Deer - wild - Hunting - Hungary - animal sample - lymph nodes - Monitoring - active - Official sampling - Objective sampling	animal	2	1	Mycobacterium - Mycobacterium spp., unspecified	1
	Deer - wild - Hunting - Hungary - animal sample - lymph nodes - Monitoring - active - Official sampling - Objective sampling	animal	3	1	Mycobacterium - Mycobacterium spp., unspecified	1
	Deer - wild - Hunting - Hungary - animal sample - lymph nodes - Monitoring - active - Official sampling - Objective sampling	animal	35	18	Mycobacterium - M. avium complex	2
					Mycobacterium - M. avium complex - M. avium subsp. hominissuis	1
					Mycobacterium - M. caprae	2
					Mycobacterium - Mycobacterium spp., unspecified	13
	Deer - wild - Hunting - Hungary - animal sample - organ/tissue - Monitoring - active - Official sampling - Objective sampling	animal	5	4	Mycobacterium - M. caprae	4
					Mycobacterium - Mycobacterium spp., unspecified	0
	Deer - wild - Hunting - Hungary - animal sample - organ/tissue - Monitoring - active - Official sampling - Objective sampling	animal	1	0	Mycobacterium - Mycobacterium spp., unspecified	0

rea 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
Magyarorszag	Deer - wild - Hunting - Hungary - animal sample - organ/tissue - Monitoring - active - Official sampling - Objective sampling	animal	2	2	Mycobacterium - M. avium complex - M. avium subsp. paratuberculosis	1
					Mycobacterium - M. caprae	1
	Dogs - Veterinary clinics - Hungary - animal sample (not specified) - Clinical investigations - Industry sampling - Not specified	animal	1	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Doves - Farm (not specified) - Hungary - animal sample - organ/tissue - Clinical investigations - Industry sampling - Not specified	animal	14	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Foxes - wild - Hunting - Hungary - animal sample - lymph nodes - Monitoring - active - Official sampling - Convenient sampling Goats - Farm (not specified) - Hungary - animal sample - organ/tissue - Clinical investigations - Official sampling - Not specified		6	0	Mycobacterium - Mycobacterium spp., unspecified	0
			1	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Jackals - wild - Hunting - Hungary - animal sample - lymph nodes - Monitoring - active - Official sampling - Convenient sampling	animal	2	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Jackals - wild - Hunting - Hungary - animal sample - organ/tissue - Monitoring - active - Official sampling - Convenient sampling	animal	1	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Pigeons - meat production flocks - Farm (not specified) - Hungary - animal sample - organ/tissue - Clinical investigations - Industry sampling - Not specified	animal	14	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Pigs - Farm (not specified) - Hungary - animal sample - organ/tissue - Clinical investigations - Industry sampling - Not specified	animal	3	3	Mycobacterium - M. avium complex - M. avium subsp. avium	3
	Sheep - Farm (not specified) - Hungary - animal sample - lymph nodes - Clinical investigations - Official sampling - Not specified	animal	2	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Wallabies - zoo animals - Zoo - Hungary - animal sample - organ/tissue - Clinical investigations - Industry sampling - Not specified	animal	1	0	Mycobacterium - Mycobacterium spp., unspecified	0
	Wild boars - wild - Hunting - Hungary Monitoring - active - Official sampling - Objective sampling	animal	268	82	Mycobacterium - M. avium complex	5
					Mycobacterium - M. avium complex - M. avium subsp. avium	2
					Mycobacterium - M. avium complex - M. avium subsp. hominissuis	3
					Mycobacterium - M. avium complex - M. avium subsp. paratuberculosis	2
					Mycobacterium - M. caprae	33
					Mycobacterium - Mycobacterium spp., unspecified	37

s, <u>s</u>	College (Associated Section 27 d) House College (Section 27 d)	unit	programme	Target verification	Total units tested	units positive	Zoonoses	N of units positive
D	Cattle (bovine animals) - Farm (not specified) - Hungary - Clinical investigations - Industry sampling - Suspect sampling	animal		NA	82	11	Salmonella - Salmonella spp.	11
	Ducks - mixed flocks/holdings - Farm (not specified) - Hungary Clinical investigations - Industry sampling Suspect sampling	herd/floc k		NA	37	25	Salmonella - Salmonella spp.	25
G	Gallus gallus (fowl) - breeding flocks, unspecified - Farm (not specified) - Hungary Control and	herd/floc	163	NA	163	1	Salmonella	0
eı	eradication programmes - Industry sampling - Census	K					Salmonella - S. Infantis	1
	Gallus gallus (fowl) - breeding flocks, unspecified - Farm (not specified) - Hungary Control and	herd/floc	198	NA	198	1	Salmonella	0
	eradication programmes - Industry sampling - Census	K					Salmonella - S. Enteritidis	1
	Gallus gallus (fowl) - breeding flocks, unspecified - Farm (not specified) - Hungary Control and	herd/floc	1045	Υ	1045	20	Salmonella	0
eı	eradication programmes - Official and industry sampling - Census	K					Salmonella - S. Enteritidis	3
							Salmonella - S. Infantis	2
							Salmonella - Salmonella spp.	15
	Gallus gallus (fowl) - broilers - Farm (not specified) - Hungary Control and eradication programmes - ndustry sampling - Not specified	herd/floc	8180	NA	1286	8	Salmonella	0
III	ndustry sampling - Not specified	ĸ					Salmonella - S. Enteritidis	5
_							Salmonella - S. Typhimurium	3
G	Gallus gallus (fowl) - broilers - Farm (not specified) - Hungary Control and eradication programmes - Official and industry sampling - Census	herd/floc	8180	Υ	8180	1103	Salmonella	0
O	onicial and industry sampling - Census	ĸ					Salmonella - S. Enteritidis	20
							Salmonella - S. Typhimurium	19
_							Salmonella - Salmonella spp.	1,064
In	Gallus gallus (fowl) - laying hens - Farm (not specified) - Hungary - Control and eradication programmes - ndustry sampling - Census	herd/floc k	78	NA	78	0	Salmonella	0
	Gallus gallus (fowl) - laying hens - Farm (not specified) - Hungary Control and eradication programmes -	herd/floc	100	NA	100	2	Salmonella	0
	ndustry sampling - Census	K					Salmonella - S. Enteritidis	2
	Gallus gallus (fowl) - laying hens - Farm (not specified) - Hungary Control and eradication programmes -	herd/floc	966	Υ	966	53	Salmonella	0
O	Official and industry sampling - Census	K					Salmonella - S. Enteritidis	18
							Salmonella - S. Typhimurium	1
							Salmonella - Salmonella spp.	34
	Geese - unspecified - Farm (not specified) - Hungary - - Clinical investigations - Industry sampling - Suspect campling	herd/floc k		NA	70	41	Salmonella - Salmonella spp.	41
	Partridges - farmed - Farm (not specified) - Hungary - Clinical investigations - Industry sampling - Suspect sampling	herd/floc k		NA	1	1	Salmonella - Salmonella spp.	1
	Pheasants - meat production flocks - Farm (not specified) - Hungary - - Clinical investigations - Industry ampling - Suspect sampling	herd/floc k		NA	4	1	Salmonella - Salmonella spp.	1
	Pigeons - meat production flocks - Farm (not specified) - Hungary Clinical investigations - Industry campling - Suspect sampling	herd/floc k		NA	16	7	Salmonella - Salmonella spp.	7
P	Pigs - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal		NA	82	23	Salmonella - Salmonella spp.	23
	Quails - laying hens - Farm (not specified) - Hungary - Clinical investigations - Industry sampling - Suspect sampling	herd/floc k		NA	1	0	Salmonella - Salmonella spp.	0
	Solipeds, domestic - Farm (not specified) - Hungary - Clinical investigations - Industry sampling - Suspect campling	animal		NA	10	1	Salmonella - Salmonella spp.	1
	Turkeys - breeding flocks, unspecified - Farm (not specified) - Hungary Control and eradication brogrammes - Industry sampling - Census	herd/floc k	35	NA	35	0	Salmonella	0
	Turkeys - breeding flocks, unspecified - Farm (not specified) - Hungary Control and eradication brogrammes - Industry sampling - Census	herd/floc k	28	NA	28	0	Salmonella	0
T	Turkeys - breeding flocks, unspecified - Farm (not specified) - Hungary Control and eradication	herd/floc	179	Υ	179	18	Salmonella	0
рі	orogrammes - Official and industry sampling - Census	k					Salmonella - Salmonella spp.	18

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under contro programme	<u></u> .	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Turkeys - fattening flocks - Farm (not specified) - Hungary Control and eradication programmes - Official	herd/floc	3209	Υ	3209	776	Salmonella	0
	and industry sampling - Census	k					Salmonella - S. Enteritidis	1
							Salmonella - S. Typhimurium	4
							Salmonella - Salmonella spp.	771

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
Magyarorszag	Bakery products - cakes Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	314	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Cheeses made from cows' milk - curd Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	79	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Cheeses made from cows' milk - unspecified - Processing plant - Hungary - food sample (not specified) -	single	25	Gram	53	0	Salmonella - S. 1,4,[5],12:i:-	0
	Surveillance - Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Cheeses made from cows' milk - unspecified - Retail - Hungary - food sample (not specified) - Surveillance -	single	25	Gram	71	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Cheeses made from goats' milk - fresh Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	12	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Cheeses made from sheep's milk - fresh Hungary - food sample (not specified) - Surveillance - Official sampling	single	25	Gram	71	0	Salmonella - S. 1,4,[5],12:i:-	0
	- Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Chocolate Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	193	0	Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Coconut - coconut products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	61	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Dairy products (excluding cheeses) - dairy desserts Hungary - food sample (not specified) - Surveillance -	single	25	Gram	130	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	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
Magyarorszag	Dairy products (excluding cheeses) - dairy desserts Hungary - food sample (not specified) - Surveillance -	single	25	Gram	130	0	Salmonella - S. Typhimurium	0
	Official sampling - Objective sampling						Salmonella - Salmonella spp., unspecified	0
	Dairy products (excluding cheeses) - ice-cream - Processing plant - Hungary - food sample (not specified) -	single	25	Gram	16	0	Salmonella - S. 1,4,[5],12:i:-	0
	Surveillance - Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Dairy products (excluding cheeses) - ice-cream - Retail - Hungary - food sample (not specified) - Surveillance -	single	25	Gram	281	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Processing plant - Hungary - food sample	single	25	Gram	16	0	Salmonella - S. 1,4,[5],12:i:-	0
	(not specified) - Surveillance - Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Retail - Hungary - food sample (not specified)	single	25	Gram	56	0	Salmonella - S. 1,4,[5],12:i:-	0
	- Surveillance - Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Egg products - dried - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	21	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Egg products - dried - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	67	1	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	1
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Egg products - liquid - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	37	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Egg products - liquid - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	59	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Eggs - table eggs - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	batch	25	Gram	740	1	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Enteritidis	1

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Eggs - table eggs - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	batch	25	Gram	740	1	Salmonella - S. Mbandaka	0
	sampling						Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Fish - raw Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	72	0	Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	
							Salmonella - Salmonella spp., unspecified	0
	Fish - smoked - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	35	0	Salmonella - S. 1,4,[5],12:i:-	-
	sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	
							Salmonella - S. Typhimurium	
							Salmonella - Salmonella spp., unspecified	0
	Infant formula - dried - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	106	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	
							Salmonella - S. Typhimurium	
							Salmonella - Salmonella spp., unspecified	0
	Infant formula - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	128	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	
							Salmonella - S. Typhimurium	
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - carcase - Slaughterhouse - Hungary - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single	400	Square	210	1	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling			centimetre			Salmonella - S. Brandenburg	-
							Salmonella - S. Derby	
							Salmonella - S. Enteritidis	
							Salmonella - S. Infantis	
							Salmonella - S. Stanley	
							Salmonella - S. Typhimurium	
							Salmonella - Salmonella spp., unspecified	·
	Meat from bovine animals - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	86	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	221	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	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
Magyarorszag	Meat from bovine animals - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	221	0	Salmonella - S. Derby	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance	single	25	Gram	6	0	Salmonella - S. 1,4,[5],12:i:-	0
	- Official sampling - Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance	single	25	Gram	3	0	Salmonella - S. 1,4,[5],12:i:-	0
	- Official sampling - Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official	single	25	Gram	49	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling	· ·					Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official	single	25	Gram	23	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - minced meat - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	10	Gram	5	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling	J					Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Cambrida C. marao	

ea 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
lagyarorszag	Meat from bovine animals - minced meat - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	10	Gram	5	0	Salmonella - S. Stanley	0
	sampling - Objective sampling						Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from bovine animals - minced meat - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	10	Gram	137	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	0
						Salmonella - S. Derby	0	
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Hungary - food sample - neck skin - Surveillance -	single	25	Gram 342	342	64	Salmonella - Other serovars	5
	Official sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	6
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	53
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	357	66	Salmonella - Other serovars	5
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	6
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	55
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	328	60	Salmonella - Other serovars	3
	Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	1
							Salmonella - S. Infantis	55
							Salmonella - S. Stanley	1
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Hungary - food sample - meat -	single	25	Gram	13	2	Salmonella - Other serovars	0
	Surveillance - Official sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	1
							Salmonella - S. Infantis	1
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	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
Magyarorszag	Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling - Objective sampling	single	25	Gram	13	2	Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - meat preparation - Retail - Hungary - food sample - meat - Surveillance -	single	25	Gram	147	27	Salmonella - Other serovars	0
	Official sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	27
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - meat products - Processing plant - Hungary - food sample - meat - Surveillance	single	25	Gram	110	1	Salmonella - Other serovars	0
	- Official sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	1
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - meat products - Processing plant - Hungary - food sample - meat - Surveillance	single	25	Gram	10	0	Salmonella - Other serovars	0
	- Official sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	191	0	Salmonella - Other serovars	0
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - meat products - Retail - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	116	0	Salmonella - Other serovars	0
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Meat from broilers (Gallus gallus) - minced meat - Processing plant - Hungary - food sample - meat - Surveillance -	single	25	Gram	1	0	Salmonella - Other serovars	0
0,	Official sampling - Objective sampling	Ü					Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from broilers (Gallus gallus) - minced meat - Retail - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	3	0	Salmonella - Other serovars	0
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from duck - carcase - Slaughterhouse - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	20	0	Salmonella - Other serovars	0
	Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from duck - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	141	11	Salmonella - Other serovars	8
	sampling						Salmonella - S. 1,4,[5],12:i:-	1
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	2
							Salmonella - Salmonella spp., unspecified	0
	Meat from geese - carcase - Slaughterhouse - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	28	2	Salmonella - Other serovars	2
	Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from geese - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	20	0	Salmonella - Other serovars	0
	sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	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
Magyarorszag	Meat from geese - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	20	0	Salmonella - S. Enteritidis	0
	sampling	-					Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - carcase - Slaughterhouse - Hungary - food sample - carcase swabs - Surveillance - Official	single	400	Square	1438	5	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling			centimetre			Salmonella - S. Brandenburg	1
							Salmonella - S. Derby	1
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	3
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
					193		Salmonella - Salmonella spp., unspecified	0
	Meat from pig - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	193	2	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	1
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	1
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective sampling	single	25	Gram	143	2	Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Brandenburg	1
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	1
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - meat preparation - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	10	Gram	53	1	Salmonella - S. 1,4,[5],12:i:-	1
	sampling - Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - meat preparation - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	10	Gram	89	1	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	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
Magyarorszag	Meat from pig - meat preparation - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	10	Gram	89	1	Salmonella - S. Typhimurium	1
	Objective sampling						Salmonella - Salmonella spp., unspecified	0
	Meat from pig - meat products - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	182	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - meat products - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	143	1	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	1
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - meat products - Processing plant - Hungary - food sample (not specified) - Surveillance - Official	single	25	Gram	486	2	Salmonella - S. 1,4,[5],12:i:-	1
	sampling - Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	1
	Meat from pig - meat products - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	255	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - meat products - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	127	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Meat from pig - meat products - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	583	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - minced meat - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling -	single	10	Gram	100	1	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	1
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from pig - minced meat - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	10	Gram	129	5	Salmonella - S. 1,4,[5],12:i:-	1
	sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	2
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	2
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - carcase - Slaughterhouse - Hungary - food sample - neck skin - Surveillance - Official sampling	single	25	Gram	197	28	Salmonella - Other serovars	8
	- Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	11
							Salmonella - S. Stanley	9
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - fresh - Processing plant - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	115	10	Salmonella - Other serovars	2
	Objective sampling						Salmonella - S. 1,4,[5],12:i:-	1
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	4
							Salmonella - S. Stanley	3
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	323	35	Salmonella - Other serovars	23
	sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	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
Magyarorszag	Meat from turkey - fresh - Retail - Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	323	35	Salmonella - S. Enteritidis	0
	sampling						Salmonella - S. Infantis	5
							Salmonella - S. Stanley	7
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - meat preparation - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	4	0	Salmonella - Other serovars	0
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - meat preparation - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	8	0	Salmonella - Other serovars	0
	Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - meat products - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	1	0	Salmonella - Other serovars	0
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - meat products - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	65	0	Salmonella - Other serovars	0
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - meat products - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	58	0	Salmonella - Other serovars	0
	Objective sampling	-					Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	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
Magyarorszag	Meat from turkey - meat products - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	58	0	Salmonella - S. Typhimurium	0
	Objective sampling						Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - meat products - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	195	0	Salmonella - Other serovars	0
	Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
					Salmonella - S. Infantis	0		
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - minced meat - Processing plant - Hungary - food sample - meat - Surveillance - Official	single	25	Gram	5	1	Salmonella - Other serovars	1
	sampling - Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from turkey - minced meat - Retail - Hungary - food sample - meat - Surveillance - Official sampling -	single	25	Gram	122	18	Salmonella - Other serovars	10
	Objective sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	3
							Salmonella - S. Stanley	5
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Meat from wild game - birds - fresh Hungary - food sample - meat - Surveillance - Official sampling - Objective	single	25	Gram	62	0	Salmonella - Other serovars	0
	sampling						Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Agona	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Milk, cows' - raw milk Hungary - food sample - milk - Surveillance - Official sampling - Objective sampling	single	25	Millilitre	139	0	Salmonella - S. 1,4,[5],12:i:-	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Other processed food products and prepared dishes - noodles Hungary - food sample (not specified) -	single	25	Gram	116	2	Salmonella - S. 1,4,[5],12:i:-	0
	Surveillance - Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	2
							Salmonella - S. Typhimurium	0

npling	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
ag	Other processed food products and prepared dishes - noodles Hungary - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	116	2	Salmonella - Salmonella spp., unspecified	0
	Other processed food products and prepared dishes - sandwiches Hungary - food sample (not specified) -	single	25	Gram	321	0	Salmonella - S. 1,4,[5],12:i:-	0
	Surveillance - Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
				Salmonella - S. Typhimurium	0			
							Salmonella - Salmonella spp., unspecified	0
•	Other products of animal origin - gelatin and collagen - Retail - Hungary - food sample (not specified) - Surveillance	single	25	Gram	49	0	Salmonella - S. 1,4,[5],12:i:-	0
	- Official sampling - Objective sampling						Salmonella - S. Brandenburg	0
							Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Infantis	0
							Salmonella - S. Stanley	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
-	Ready-to-eat salads Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	le 25 Gram 217	0	Salmonella - S. 1,4,[5],12:i:-	0		
	sampling			Gram 21			Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Seeds, sprouted - ready-to-eat - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	55	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Spices and herbs - dried Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	178	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Vegetables - pre-cut - Processing plant - Hungary - food sample (not specified) - Surveillance - Official sampling -	single	25	Gram	4	0	Salmonella - S. 1,4,[5],12:i:-	0
	Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Vegetables - pre-cut - Retail - Hungary - food sample (not specified) - Surveillance - Official sampling - Objective	single	25	Gram	161	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling	-					Salmonella - S. Enteritidis	0
							Salmonella - S. Mbandaka	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Compound feedingstuffs for cattle - final product - Feed mill - Hungary - feed sample - Surveillance - Official	single	25	Gram	46	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Give	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Compound feedingstuffs for pigs - final product - Feed mill - Hungary - feed sample - Surveillance - Official	single	25	Gram	202	2	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Give	2
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Compound feedingstuffs for poultry (non specified) - final product - Feed mill - Hungary - feed sample -	single	25	Gram	125	0	Salmonella - S. 1,4,[5],12:i:-	0
	Surveillance - Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Give	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Compound feedingstuffs for poultry, breeders - final product - Feed mill - Hungary - feed sample - Surveillance -	single 25 Gram 6	6	0	Salmonella - S. 1,4,[5],12:i:-	0		
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Give	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Compound feedingstuffs for poultry, broilers - final product - Feed mill - Hungary - feed sample - Surveillance -	single	25	Gram	81	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Give	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Compound feedingstuffs for poultry, laying hens - final product - Feed mill - Hungary - feed sample - Surveillance -	single	25	Gram	62	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Give	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Feed material of cereal grain origin - barley derived - Feed mill - Hungary - feed sample - Surveillance - Official	single	25	Gram	4	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Feed material of cereal grain origin - maize derived - Feed mill - Hungary - feed sample - Surveillance - Official	single	25	Gram	13	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0

npling	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
zag	Feed material of cereal grain origin - maize derived - Feed mill - Hungary - feed sample - Surveillance - Official sampling - Objective sampling	single	25	Gram	13	0	Salmonella - Salmonella spp., unspecified	0
	Feed material of cereal grain origin - wheat derived - Feed mill - Hungary - feed sample - Surveillance - Official	single	25	Gram	6	0	ge Zoonoses positive Salmonella - Salmonella spp., unspecified 0 Salmonella - S. 1,4,[5],12:i:- 0 Salmonella - S. Enteritidis 0 Salmonella - S. Typhimurium 0 Salmonella - Salmonella spp., unspecified 0 Salmonella - S. Derby 0 Salmonella - S. Derby 0 Salmonella - S. Derby 0 Salmonella - S. Give 0 Salmonella - S. Typhimurium 0 Salmonella - Salmonella spp., unspecified 0 Salmonella - S. Derby 1 Salmonella - S. Typhimurium 0 Salmonella - S. Typhimurium 0 Salmonella - S. Typhimurium 0 Salmonella - Salmonella spp., unspecified 0 Salmonella - S. Typhimurium 0 Salmonella -	
	sampling - Objective sampling					0 0 0 0 0 0 0 0	Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
								0
	Feed material of land animal origin - blood meal - Feed mill - Hungary - feed sample - Surveillance - Official	single	25	Gram	6	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Derby	0
							Salmonella - S. Enteritidis	0
							Salmonella - S. Give	0
							Salmonella - S. Typhimurium	0
								0
	Feed material of marine animal origin - fish meal - Feed mill - Hungary - feed sample - Surveillance - Official	single	25	Gram	6	2	Salmonella - S. 1,4,[5],12:i:-	0
	sampling - Objective sampling						Salmonella - S. Derby	1
							Salmonella - S. Enteritidis	0
					om 1 0		Salmonella - S. Give	1
							Salmonella - S. Typhimurium	0
								0
	Feed material of oil seed or fruit origin - other oil seeds derived - Feed mill - Hungary - feed sample - Surveillance -	single	25	Gram	1	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
								0
	Feed material of oil seed or fruit origin - rape seed derived - Feed mill - Hungary - feed sample - Surveillance -	single	25	Gram	2	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
								0
	Feed material of oil seed or fruit origin - soya (bean) derived - Feed mill - Hungary - feed sample - Surveillance -	single	25	Gram	7	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Feed material of oil seed or fruit origin - sunflower seed derived - Feed mill - Hungary - feed sample - Surveillance -	single	25	Gram	2	0	Salmonella - S. 1,4,[5],12:i:-	0
	Official sampling - Objective sampling						Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0
	Other feed material - other plants - Feed mill - Hungary - feed sample - Surveillance - Official sampling - Objective	single	25	Gram	2	0	Salmonella - S. 1,4,[5],12:i:-	0
	sampling	-					Salmonella - S. Enteritidis	0
							Salmonella - S. Typhimurium	0
							Salmonella - Salmonella spp., unspecified	0

Table STAPHYLOCOCCAL ENTEROTOXINS in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	•	Sample weight unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Dairy products, unspecified Hungary - food sample (not specified) - Clinical investigations - Official sampling - Suspect sampling	single	25	Gram	18	4	Staphylococcal enterotoxins	0
	Other processed food products and prepared dishes - unspecified - Catering (not specified) - Hungary - food sample (not specified) - Clinical investigations - Official sampling - Suspect sampling	single	25	Gram	7	4	Staphylococcal enterotoxins	0

Table STAPHYLOCOCCUS AUREUS METICILLIN RESISTANT (MRSA) in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Cats - pet animals - Veterinary clinics - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Staphylococcus - S. aureus	1
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0
	Cattle (bovine animals) - Farm (not specified) - Hungary - animal sample - hide - Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Staphylococcus - S. aureus	1
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0
	Cattle (bovine animals) - Farm (not specified) - Hungary - animal sample - milk - Clinical investigations - Industry sampling - Suspect sampling	herd/floc	71	33	Staphylococcus - S. aureus	31
		k			Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	2
	Dogs - pet animals - Veterinary clinics - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	3	3	Staphylococcus - S. aureus	3
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0
	Gallus gallus (fowl) - unspecified - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	89	63	Staphylococcus - S. aureus	63
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0
	Pheasants - meat production flocks - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Staphylococcus - S. aureus	0
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	1
	Pigs - unspecified - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	35	16	Staphylococcus - S. aureus	15
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	1
	Rabbits - farmed - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	17	3	Staphylococcus - S. aureus	3
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0
	Rodents - laboratory animal - Unspecified - Hungary Unspecified - Industry sampling - Not specified	animal	37	11	Staphylococcus - S. aureus	11
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0
	Sheep - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Staphylococcus - S. aureus	1
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0
	Turkeys - unspecified - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	5	4	Staphylococcus - S. aureus	4
					Staphylococcus - S. aureus, meticillin resistant (MRSA) - MRSA, unspecified	0

Table TOXOPLASMA in animal

			Total	Total		
		Sampling	units	units		N of units
Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	unit	tested	positive	Zoonoses	positive
Magyarorszag	Cats - pet animals - Veterinary clinics - Hungary Clinical investigations - Not applicable - Suspect sampling	animal	1	1	Toxoplasma	1
	Cattle (bovine animals) - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	58	0	Toxoplasma	0
	Sheep - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	6	1	Toxoplasma	1

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
Magyarorszag	Foxes - wild - Hunting - Hungary Monitoring - Official sampling - Objective sampling	animal	845	22	Trichinella - T. britovi	21
					Trichinella - T. spiralis	1
					Trichinella - Trichinella spp., unspecified	0
	Jackals - wild - Hunting - Hungary Monitoring - Official sampling - Objective sampling	animal	14	2	Trichinella - T. spiralis	2
					Trichinella - Trichinella spp., unspecified	0
	Pigs - Slaughterhouse - Hungary Surveillance - Official sampling - Census	animal	42227 92	0	Trichinella - Trichinella spp., unspecified	0
	Rats - wild - Unspecified - Hungary Unspecified - Official sampling - Convenient sampling	animal	1	0	Trichinella - Trichinella spp., unspecified	0
	Rodents - wild - Unspecified - Hungary Unspecified - Official sampling - Convenient sampling	animal	1	0	Trichinella - Trichinella spp., unspecified	0
	Solipeds, domestic - Slaughterhouse - Hungary Surveillance - Official sampling - Census	animal	1022	0	Trichinella - Trichinella spp., unspecified	0
	Wild boars - wild - Game handling estabilishment - Hungary Surveillance - Official sampling - Census	animal	65400	8	Trichinella - T. britovi	4
					Trichinella - T. spiralis	4
					Trichinella - Trichinella spp., unspecified	0

Table WEST NILE VIRUS in animal

of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Vaccination status	Total units tested	Total units positive	Zoonoses		N of units positive
yarorszag	Birds - wild - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	3	0		West Nile virus	0
	Corvids, unspecified - wild - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	6	0		West Nile virus	0
	Crows - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	1	0		West Nile virus	0
	Ducks - meat production flocks - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	1	0		West Nile virus	0
	Falcons - wild - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	13	1		West Nile virus	1
	Gallus gallus (fowl) - laying hens - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	1	0		West Nile virus	0
	Owls - wild - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	1	0		West Nile virus	0
	Passeriformes, unspecified - wild - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	5	0		West Nile virus	0
	Pigeons - wild - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	1	0		West Nile virus	0
	Psittacidae - zoo animals - Zoo - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	1	0		West Nile virus	0
	Quails - meat production flocks - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	2	0		West Nile virus	0
	Solipeds, domestic - Veterinary clinics - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	31	1		West Nile virus	1
	Swans - wild - Natural habitat - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	NOT AVAILABL E	1	0		West Nile virus	0

Table YERSINIA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Total units tested	Total units positive	Zoonoses	N of units positive
Magyarorszag	Cattle (bovine animals) - Farm (not specified) - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	2	1	Yersinia - Y. enterocolitica	1
					Yersinia - Yersinia spp., unspecified	0
	Monkeys - zoo animal - Zoo - Hungary Clinical investigations - Industry sampling - Suspect sampling	animal	1	1	Yersinia - Y. pseudotuberculosis	1
					Yersinia - Yersinia spp., unspecified	0
	Rats - wild - Unspecified - Hungary Unspecified - Official sampling - Not specified	animal	1	0	Yersinia - Yersinia spp., unspecified	0
	Rodents - wild - Unspecified - Hungary Unspecified - Official sampling - Not specified	animal	1	0	Yersinia - Yersinia spp., unspecified	0

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

	Outbreak strenght		Stror	ng			Wea	k	
Causative agent	Food vehicle	N outbreaks	N human cases	N hospitalized	N deaths	N outbreaks	N human cases	N hospitalized	N deaths
Bacillus - B. cereus	Vegetables and juices and other products thereof	1	170	15	0				
Calicivirus - norovirus (Norwalk-like	Mixed food	3	301	0	0	4	174	1	0
virus)	Broiler meat (Gallus gallus) and products thereof	1	49	0	0				
Campylobacter - C. jejuni	Broiler meat (Gallus gallus) and products thereof					1	3	0	0
Campylobacter - Campylobacter spp., unspecified	Eggs and egg products	1	80	0	0				
Clostridium - C. botulinum	Canned food products	1	6	5	0				
Salmonella - S. Enteritidis - PT 14b	Pig meat and products thereof					1	112	2	0
Salmonella - S. Enteritidis - PT 2	Sweets and chocolate	1	12	4	0	1	17	3	0
	Pig meat and products thereof					1	15	2	0
	Eggs and egg products					1	10	4	0
Salmonella - S. Enteritidis - PT 4	Mixed food					1	29	0	0
Salmonella - S. Enteritidis - PT 6	Mixed food	1	47	2	0				
Salmonella - S. Enteritidis - PT 8	Mixed food	2	91	34	2	1	7	4	0
	Unknown					1	42	2	0
Salmonella - S. Typhimurium	Unknown					1	62	24	0
Staphylococcal enterotoxins -	Mixed food					1	33	7	0
Enterotoxin, unspecified	Dairy products (other than cheeses)	2	20	3	0				
Unknown	Milk					1	18	0	0
	Mixed food					4	154	0	0
	Sweets and chocolate					1	6	0	0
	Vegetables and juices and other products thereof					2	234	0	0
	Pig meat and products thereof					2	15	0	0

Strong Foodborne Outbreaks: detailed data

Causative agent	Other Causative Agent	FBO nat.	Outbreak type	More food Food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Bacillus - B. cereus	NOT AVAILAB LE	ÉTBI_29	General	Vegetables and juices and other products thereof	Analytical epidemiologic al evidence	School or kindergart en	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Unprocessed contaminate d ingredient		1	170	15	0
Calicivirus - norovirus (Norwalk- like virus)	NOT AVAILAB LE	ÉTBI_2	General	Broiler meat (Gallus gallus) and products thereof	Analytical epidemiologic al evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Infected food handler	ZOO_CAT_PARAM_Z OO: 'Viruses - Norovirus	1	49	0	0
		ÉTBI_6	General	Mixed food	Descriptive epidemiologic al evidence	School or kindergart en	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Infected food handler	ZOO_CAT_PARAM_Z OO: 'Viruses - Norovirus	2	250	0	0
		ÉTBI_9	General	Mixed food	Analytical epidemiologic al evidence	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Unknown	ZOO_CAT_PARAM_Z OO: 'Viruses - Norovirus	1	51	0	0
Campyloba cter - Campyloba cter spp., unspecified	NOT AVAILAB LE	ÉTBI_1	General	Eggs and egg products	Analytical epidemiologic al evidence	Canteen or workplace catering	Canteen or workpla ce catering	Hunga ry	Cross- contaminatio n		1	80	0	0
Clostridium - C. botulinum	NOT AVAILAB LE	ÉTBI_11	General	Canned food products	Detection of causative agent in food chain or its environment - Detection of indistinguisha ble causative agent in humans	Household	Others	Hunga ry	Inadequate heat treatment		1	6	5	0

Causative agent	Other Causative Agent	FBO nat.	Outbreak type	More food Food vehicle 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 - S. Enteritidis - PT 2	NOT AVAILAB LE	ÉTBI_24	General	Sweets and chocolate	Detection of causative agent in food vehicle or its component - Detection of indistinguisha ble causative agent in humans	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Infected food handler		1	12	4	0
Salmonella - S. Enteritidis - PT 6	NOT AVAILAB LE	ÉTbi_12	General	Mixed food	Analytical epidemiologic al evidence	Residentia I institution (nursing home or prison or boarding school) (not specified)	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Unknown		1	47	2	0
Salmonella - S. Enteritidis - PT 8	NOT AVAILAB LE	ÉTBI_13	General	Mixed food	Detection of causative agent in food vehicle or its component - Detection of indistinguisha ble causative agent in humans	Residentia I institution (nursing home or prison or boarding school) (not specified)	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Infected food handler		1	51	30	2
		ÉTBI_27	General	Mixed food	Detection of causative agent in food vehicle or its component - Detection of indistinguisha ble causative agent in humans	School or kindergart en	Restaur ant or Cafe or Pub or Bar or Hotel or Catering service	Hunga ry	Inadequate heat treatment		1	40	4	0
Staphyloco ccal enterotoxin s - Enterotoxin, unspecified	NOT AVAILAB LE	ÉTBI_30	General	Dairy products (other than cheeses)	Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomon ic to causative agent	Restaurant or Cafe or Pub or Bar or Hotel or Catering service	Farm	Hunga ry	Inadequate heat treatment		1	17	0	0

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	More food Food vehicle 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
Staphyloco ccal enterotoxin s - Enterotoxin, unspecified	NOT AVAILAB LE	ÉTBI_5	General	Dairy products (other than cheeses)	Detection of causative agent in food chain or its environment - Symptoms and onset of illness pathognomon ic to causative agent	Household	Others	Hunga ry	Infected food handler		1	3	3	0

Weak Foodborne Outbreaks: detailed data

Causative agent	Other Causative Agent	FBO nat.	Outbreak type	More food Food vehicle vehicle info	Nature of evidence	Setting	Place of origin of problem		Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Calicivirus - norovirus (Norwalk- like virus)	NOT AVAILAB LE	ÉTBI_28	General	Mixed food	Unknown	School or kinderg arten	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Cross- contaminatio n	ZOO_CAT_PA RAM_ZOO: 'Viruses - Norovirus	2	105	0	0
		ÉTBI_34	General	Mixed food	Unknown	School or kinderg arten	Unknown	Hung ary	Unknown	ZOO_CAT_PA RAM_ZOO: 'Viruses - Norovirus	1	45	1	0
		ÉTBI_8	General	Mixed food	Unknown	Cantee n or workpla ce catering	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Infected food handler	ZOO_CAT_PA RAM_ZOO: 'Viruses - Norovirus	1	24	0	0
Campylob acter - C. jejuni	NOT AVAILAB LE	ÉTBI_18	General	Broiler meat (Gallus gallus) and products thereof	Unknown	Restaur ant or Cafe or Pub or Bar or Hotel or Caterin g service	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Inadequate heat treatment		1	3	0	0
Salmonell a - S. Enteritidis - PT 14b	NOT AVAILAB LE	ÉTBI_31	General	Pig meat and products thereof	Unknown	School or kinderg arten	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Inadequate heat treatment		1	112	2	0
Salmonell a - S. Enteritidis - PT 2	AVAILAB		General	Pig meat and products thereof	Unknown	Restaur ant or Cafe or Pub or Bar or Hotel or Caterin g service	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Infected food handler		1	15	2	0
		ÉTBI_20	General	Eggs and egg products	Unknown	School or kinderg arten	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Inadequate heat treatment		1	10	4	0

Causative agent	Other Causative Agent	FBO nat.	Outbreak type	More food Food vehicle 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
Salmonell a - S. Enteritidis - PT 2	NOT AVAILAB LE	ÉTbl_3	General	Sweets and chocolate	Unknown	Househ old	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Unknown		1	17	3	0
Salmonell a - S. Enteritidis - PT 4	NOT AVAILAB LE	ÉTBI_19	General	Mixed food	Unknown	Restaur ant or Cafe or Pub or Bar or Hotel or Caterin g service	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Unknown		1	29	0	0
Salmonell a - S. Enteritidis - PT 8	NOT AVAILAB LE	ÉTbi_10	General	Mixed food	Unknown	Restaur ant or Cafe or Pub or Bar or Hotel or Caterin g service	Canteen or workplace catering	Hung ary	Unknown		1	7	4	0
		ÉTBI_32	General	Unknown	Unknown	Dissemi nated cases (not specifie d)	Unknown	Hung ary	Unknown		1	42	2	0
Salmonell a - S. Typhimuri um	NOT AVAILAB LE	ÉTbl_7	General	Unknown	Unknown	Dissemi nated cases (not specifie d)	Unknown	Hung ary	Unknown		1	62	24	0
Staphyloc occal enterotoxi ns - Enterotoxi n, unspecifie d	NOT AVAILAB LE	ÉTBI_16	General	Mixed food	Unknown	Cantee n or workpla ce catering	Canteen or workplace catering	Hung ary	Unknown		1	33	7	0
Unknown	NOT AVAILAB LE	ÉTBI_15	General	Pig meat and products thereof	Unknown	Restaur ant or Cafe or Pub or Bar or Hotel or Caterin g service	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Unknown		1	3	0	0

Causative agent	Other Causative Agent	FBO nat.	Outbreak type	More food Food vehicle vehicle info	Nature of evidence	Setting	Place of origin of problem		Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Unknown	NOT AVAILAB LE	ÉTBI_21	General	Mixed food	Unknown	Restaur ant or Cafe or Pub or Bar or Hotel or Caterin g service	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Storage time/tempera ture abuse		1	4	0	0
		ÉTBI_23	General	Pig meat and products thereof	Unknown	Cantee n or workpla ce catering	Canteen or workplace catering	Hung ary	Unknown		1	12	0	0
		ÉTBI_25	General	Mixed food	Unknown	School or kinderg arten	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Cross- contaminatio n		3	150	0	0
		ÉTBI_26	General	Vegetables and juices and other products thereof	Unknown	School or kinderg arten	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Inadequate heat treatment		2	234	0	0
		ÉTBI_33	General	Milk	Unknown	School or kinderg arten	Processin g plant	Hung ary	Other contributory factor		1	18	0	0
		ÉTBI_4	General	Sweets and chocolate	Unknown	Restaur ant or Cafe or Pub or Bar or Hotel or Caterin g service	Restauran t or Cafe or Pub or Bar or Hotel or Catering service	Hung ary	Unknown		1	6	0	0

ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

Table Antimicrobial susceptibility testing of Campylobacter - C. jejuni in Turkeys - fattening flocks (not specified)

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

Sampler: Official sampling Sampling Sampling Sampling Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Aminoglycosides - Streptomycin	Fluoroquinolones - Ciprofloxacin	Macrolides - Erythromycin	Quinolones - Nalidixic acid	Tetracyclines - Tetracycline
	ECOFF	2	4	0.5	4	16	1
	Lowest limit	0.12	0.25	0.12	1	1	0.5
	Highest limit	16	16	16	128	64	64
	N of tested isolates	87	87	87	87	87	87
MIC	N of resistant isolates	0	2	83	0	82	51
<=0.12				4			
0.25		2					
<=0.5							33
0.5		33					
<=1					85		
1		50	12				3
2		2	41		1	1	1
4			32		1	2	1
8				33		1	
16				34		1	3
>16			2	16			
32						1	2
64						2	4
>64						79	40

Table Antimicrobial susceptibility testing of Campylobacter - C. jejuni in Gallus gallus (fowl) - broilers (not specified)

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

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

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Aminoglycosides - Streptomycin	Fluoroquinolones - Ciprofloxacin	Macrolides - Erythromycin	Quinolones - Nalidixic acid	Tetracyclines - Tetracycline
	ECOFF	2	4	0.5	4	16	1
	Lowest limit	0.12	0.25	0.12	1	1	0.5
	Highest limit	16	16	16	128	64	64
	N of tested isolates	150	150	150	150	150	150
МІС	N of resistant isolates	0	2	140	0	137	87
<=0.12		1		9			
0.25				1			
<=0.5							62
0.5		68					
<=1					150		
1		77	31				1
2		4	77			2	1
4			40	4		4	
8			2	64		7	1
16				65			5
>16				7			
32						1	3
64			·		·	3	12
>64						133	65

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

Table Antimicrobial susceptibility testing of Salmonella - S. Agona in Gallus gallus (fowl) - laying hens (not specified)

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
міс	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1			1							1
<=0	.5	1				1									
<=1										1	1				
<=2														1	
<=4												1			
4									1						
<=8			1												
64													1		

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Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MIC	N of resistant isolates	0	0	0	0	0	2	1	0	0	0	2	2	2	1
	.015						4								
<=0				6											
<=0					6										4
0.25							2								
<=0	.5	6				6									
0.5								4							1
<=1										2	5				
1								1							
<=2														4	
2								1		3	1	4			
<=4										4		4			
<u>4</u> <=8			6						3	1					
8			б						3						
32									ა					1	
>32														<u> </u>	1
64													1		•
>64														1	
>12												2		•	
>10												_	2		

Table Antimicrobial susceptibility testing of Salmonella - S. Agona in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	0	0	0	0	0	1	0	0	0	0	1	1	1	0
<=(0.015						1								
	0.03			2											
).25				2										2
<=(2				2									
0.5							1	1							
<='											1				
1								1							
<=2	2													1	
2										1	1				
<=4										<u> </u>		1			
4			•						1	1					
<=8	S		2												
8									1						
64													1		
>64												4		1	
>12												1	4		
>10	124												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0.	015						1								
<=0.	03			1											
<=0.	25				1										1
<=0.	5	1				1									
0.5								1							
<=1										1	1				
<=2									1					1	
<=4												1			
<=8	_		1												
32													1		

Table Antimicrobial susceptibility testing of Salmonella - S. Anatum in Turkeys - fattening flocks (not specified)

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census Prog

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1										1
<=0	.5	1				1									
0.5								1							
<=1										1	1				
<=2														1	
<=4												1			
4									1						
<=8			1												
64													1		

Sampling Strategy: Census

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	1	1	1	0	0	1	0	1	0
<=0.	03			1											
<=0.	25				1										
<=0.	5	1				1									
0.5							1								1
<=1											1				
2								1		1					
16			1												
>64									1					1	
128		•	•				•				•	•	1		
>128	3											1			

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	1	0	1	0	1	1
<=0							5								
<=0				5											
0.06				1			1								
<=0					6			1							5
<=0	.5	6				6									
0.5								5							
<=1										3					
<=2														5	
2										2	6				
<=4												5			
4									6						
<=8			6												
32										1				1	
>32															1
64													3		
128													3		
>12	8			•		•						1		•	

Table Antimicrobial susceptibility testing of Salmonella - S. Bovismorbificans in Gallus gallus (fowl) - broilers (not specified)

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication programmes Programme Code: AMR MON

Sampler: Official and industry sampling

Sampling Strategy: Census

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
N of resistant MIC isolates	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<=0.015						1								
<=0.03			1											
<=0.25				1										1
<=0.5	1				1									
<=2													1	
2							1		1	1				
<=4											1			
4								1						
<=8		1												
128												1		

Table Antimicrobial susceptibility testing of Salmonella - S. Bovismorbificans in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	0	0	0	0	1	0	0	1	0	1	1	1	0
<=0	.03			1											
<=0	.25				1										
0.5								1							1
<=1											1				
1						1									
<=8			1												
8									1						
>8							1								
16		1													
>64										1				1	
>12	8											1			
>10	24												1		

Table Antimicrobial susceptibility testing of Salmonella - S. Bovismorbificans in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	2	0	0
<=(0.015						1								
<=(0.03			2											
0.0							1								
).25				2										
<=(2				2									
0.5								2							2
<=										2					
<=2	2													2	
2											2				
<=4	1											2			
<=8	3		2												
8									1						
16									1						
>10)24												2		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	0	0	0	0	0	1	0	0	0	0	1	1	1	0
<=	0.015						1								
	0.03			2											
	0.25				2										
<=		2				2									
0.5							1	1							2
<=	1									1	2				
_1								1							
<=	2													1	
<=	4											1			
4										1					
<=	8		1												
8									2						
16			1												
64													1		
>6														1	
128	8											1			
>10	024												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	0	0	0	0	0	2	1	0	2	0	2	1	2	1
<=	0.03			2											
0.1	2						1								
_	0.25				2										
<=		2				2									
0.5							1								1
1								1							
2								1			2				
4									1						
<=	3		1												
16			1						1				1		
>3	2														1
>64	1									2				2	
>12	28											2			
>10)24												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census programming Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	28	28	28	28	28	28	28	28	28	28	28	28	28	28
MIC	N of resistant isolates	0	2	0	0	0	28	16	3	28	0	28	2	28	12
<=(0.03			28											
0.1	2						12								
<=().25				27										12
0.2							5								
<=(26				27									
0.5					1		10	8							3
<=1											7				
1		2				1	1	4							1
2								14			21				
4								2	5						
<=8	3		16												
8									12						
16			10						8				4		
32									3	5			22		
>32	2														12
64			1							1				1	
>64										22				27	
128	B		1									2			
>12												26			
>10)24												2		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	N of resistant isolates	0	0	0	0	0	2	1	1	2	1	2	0	2	0
<=0	.03			2											
<=0	.25				2										2
0.25	i						1								
<=0	.5	2				2									
<=1											1				
1							1	1							
4								1			1				
<=8			1												
8									1						
16			1												
32									1				1		
64										1			1		
>64										1				2	
>12	8											2			

Table Antimicrobial susceptibility testing of Salmonella - S. Bredeney in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
міс	N of resistant isolates	0	0	0	0	0	1	1	0	1	0	1	0	1	0
<=0	.03			1											
<=0	.25				1										1
<=0	.5	1				1									
0.5							1								
2								1			1				
8									1						
16			1												
32										1			1		
>64														1	
>12	8											1			

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	9	9	9	9	9	9	9	9	9	9	9	9	9	9
МІС	N of resistant isolates	0	1	0	0	0	9	6	1	9	2	9	2	9	5
<=0				8											
0.06	3			1											
0.12							2								
<=0					8										2
0.25							2								
<=0		8				9									
0.5					1		4	1							1
1		1						2			7				1
2							1	4			7				
<u>4</u> <=8			3					2	1						1
8			3						3		1				
16			5						4						
>16			<u> </u>								1				
32			1						1				4		
>32			•												4
64														1	
>64										9				8	
128													2		
>12	8											9			
256													1		
>10	24												2		

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	3	3	3	3	3	3	3	3	3	3	3	3	3	3
міс	N of resistant isolates	0	0	0	0	0	3	1	0	3	0	3	0	3	1
<=0	.03			3											
0.12							1								
<=0					3										2
0.2	5						1								
<=0	.5	3				3									
0.5							1								
<=1											1				
1								2							
2								1			2				
4									1						
<=8	1		2												
16			1						2						
32										1			3		
>32															1
>64										2				3	
128												1			
>12	8											2			

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	1	0	0	0	0
<=0	.03			1											
0.03	3						1								
<=0	.25				1										1
<=C	.5	1				1									
0.5								1							
<=2														1	
2										1					
<=4												1			
4											1				
<=8			1												
8	•			•		•	•	•	1				•	•	
128													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	015						1								
<=0	03			1											
<=0	25				1			1							1
<=0	5	1				1									
<=1										1	1				
<=2														1	
<=4												1			
<=8			1												
8									1						
64												_	1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census Prog

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=().015						2								
<=(0.03			2											
<=().25				2			2							2
<=().5	2				2									
<=1										2	2				
<=2	2													1	
<=4	1											1			
4									1					1	
<=8	3		2												
8												1			
16									1						
32													1		
64													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	21	21	21	21	21	21	21	21	21	21	21	21	21	21
міс	N of resistant isolates	0	0	0	0	0	2	1	0	0	6	2	0	0	0
	.015						9								
<=0				17											
0.03							10								
0.06				4											
<=0					20			8							18
0.25							1								
<=0		20				20									
0.5					11		1	11							2
<=1										7	6				
1		1				1		1							1
<=2														20	
2								1		10	9	40			
<=4									9	4	6	18			
4			20						9	4	О				
<=8			20						12			1		1	
8 16			1						12				1	1	
32			ı										4		
64													5		
128												1	10		
>12												1	10		
256	<u> </u>											'	1		
200															

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census programmes
Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	1	0	0	0	0
<=0	.015						1								
<=0	.03			2											
0.03							1								
<=0					2			1							1
<=0		2				2									
0.5								1							1
<=2	!													2	
2										2	1				
<=4												1			
4									2		1				
<=8			2												
8												1			
32													1		
64													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Cephalosporins + Cephalosporins +

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Carbapenems - Ertapenem	Carbapenems - Imipenem	Carbapenems - Meropenem	Cephalosporins - Cefepime	Cephalosporins - Cefotaxime	Cephalosporins - Cefoxitin	Cephalosporins - Ceftazidime	ß lactamase inhibitores - Cefotaxime + Clavulanic acid	ß lactamase inhibitores - Ceftazidime + Clavulanic acid	Penicillins - Temocillin
	ESBL genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
	AMPC genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
	CARBAPENEM genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
	Cefotaxime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE	NOT AVAILABLE
	Ceftazidime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE
	ECOFF	0.06	1	0.125	0.125	0.5	8	2	0.5	2	32
	Lowest limit	0.015	0.12	0.03	0.06	0.25	0.5	0.25	0.06	0.12	0.5
	Highest limit	2	16	16	32	128	64	128	64	128	64
	N of tested isolates	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	15	2									
<=0.0	3			2							
<=0.0					2				1		
<=0.1	2		1							1	
0.12									1		
<=0.2	5					2		2			
0.25			1							1	
2							2				
8											2

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census progr

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	11	11	11	11	11	11	11	11	11	11	11	11	11	11
МІС	N of resistant isolates	0	0	0	0	0	2	0	0	0	5	2	0	2	0
	.015						6								
<=0				11											
0.0	3						3								
<=0					11			2							8
0.2		44				44	2								
<=0 0.5		11				11		4							3
<=1								4		1	2				3
1								5		'	2				
<=2								- J						9	
2										9	4				
<=4												9			
4									7	1	4				
<=8			11												
8									3		1				
16									1						
32													1		
64													4		
>64													•	2	
128 >12	0											2	6		
>12	ŏ											2			

Table Antimicrobial susceptibility testing of Salmonella - S. Enteritidis in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	- Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
MIC	N of resistant isolates	0	0	0	0	0	1	0	0	0	0	1	0	0	0
<=(0.015						1								
	0.03			2											
).25				2										2
0.2							1								
<=(2				2									
0.5								2							
<=′										1					
<=2	2													2	
2										1	2				
<=4	1											1			
4									1						
<=8	3		2												
8									1						
64													1		
128	3												1		
>12	28											1			

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
МІС	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=(0.015						1								
<=(0.03			1											
<=().25				1			1							1
<=0).5	1				1									
<=1										1					
<=2	2													1	
2											1				
4									1						
<=8	3		1												
8												1			
64													1		

Sampling Strategy: Census

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

programmes Programme Code: AMR MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Carbapenems - Ertapenem	Carbapenems - Imipenem	Carbapenems - Meropenem	Cephalosporins - Cefepime	Cephalosporins - Cefotaxime	Cephalosporins - Cefoxitin	Cephalosporins - Ceftazidime	Cephalosporins + ß lactamase inhibitores - Cefotaxime + Clavulanic acid	Cephalosporins + ß lactamase inhibitores - Ceftazidime + Clavulanic acid	Penicillins - Temocillin
	ESBL genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
	AMPC genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
	CARBAPENEM genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
	Cefotaxime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE	NOT AVAILABLE
	Ceftazidime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE
	ECOFF	0.06	1	0.125	0.125	0.5	8	2	0.5	2	32
	Lowest limit	0.015	0.12	0.03	0.06	0.25	0.5	0.25	0.06	0.12	0.5
	Highest limit	2	16	16	32	128	64	128	64	128	64
	N of tested isolates	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	15	1									
<=0.0	3			1							
<=0.0	6				1						
<=0.1	2		1								
0.12									1		
<=0.2	5					1		1		·	
0.25										1	
8							1				1
ŏ											1

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Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1			1							1
<=0	.5	1				1									
<=1											1				
<=2														1	
2										1					
<=4												1			
4									1						
<=8			1												
32													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.03			1											
0.03	1						1								
<=0	.25				1										1
<=0	.5	1				1									
<=1											1				
1								1							
2										1					
<=4												1			
4														1	
16			1						1						
256													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MIC	N of resistant isolates	0	0	0	0	0	4	1	0	0	0	4	4	4	0
<=0	.03			6											
0.03	3						2								
<=0					6			1							5
0.2							1								
<=0		6				4									
0.5							3	2							1
<=1										2	6				
1						2		2							
<=2									1					2	
2										3					
<=4										4		2			
<u>4</u> <=8			4						1	1					
8			4					1	1						
16			2					1	3						
64													2	1	
>64													2	3	
>12												4		<u> </u>	
>10												•	4		
- 10													•		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	46	46	46	46	46	46	46	46	46	46	46	46	46	46
	N of resistant isolates	0	1	0	0	0	44	22	3	8	0	45	37	44	1
	.015						2								
<=0				46											
<=0	.25				41			4							31
0.2							6								
<=0		46			-	31	40	•							40
0.5					5		18	6		6	43				13
<=1						15	12	14		б	43				1
<=2						13	12	14	1					2	1
2	•						2	21	<u>'</u>	13	3				
<=4								21		10		1			
4							6	1	7	19					
<=8			22												
8									15						
16			23						20						
32									3			1	1		
>32	!														1
64													8	3	
>64										8				41	
>12			1									44			
>10	24												37		

Sampling Strategy: Census

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Analytical Method: Dilution - sensititre

programmes Programme Code: AMR MON

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	125	125	125	125	125	125	125	125	125	125	125	125	125	125
	N of resistant isolates	2	9	0	0	0	125	47	5	4	2	125	105	104	0
<=0				119											
0.06	6			6											
0.12							2								
<=0					103			6							81
0.25							16								
<=0		121				74									
0.5					22		67	14							41
<=1										13	122				
1		1				50	35	58							3
<=2		<u> </u>				<u> </u>			1		•			3	
2		1				1	2	44	47	43	1			40	
4			10				3	3	17	64	2			10	
<=8			43						54	1				8	
8 16			73						48	1				8	
32		ı	9						5						
>32		1	3						3						
64		ı											13	7	
>64										4			10	97	
128										7		3	5	<u> </u>	
>12												122			
256	-												2		
>10													105		

Hungary - 2014 114 Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	98	98	98	98	98	98	98	98	98	98	98	98	98	98
	N of resistant isolates	0	1	0	0	0	98	31	2	7	1	98	83	80	5
<=0	.03			95											
0.06	;			3											
<=0					90										77
0.25							26								
<=0	5	97				75									
0.5					8		58	21							15
<=1										10	91				
1		1				22	9	46							1
<=2									1					8	
2						11	4	29		37	6				
4							1	2	23	43				9	1
<=8			52											•	
16									50	1				1	
			45						22	1	4				
>16			1						2		1		3	4	
>32			1						2				3	1	4
64										1			8	3	4
>64										5			0	76	
>64										<u> </u>		1	3	70	
>120												97	<u> </u>		
256	,											- 31	1		
512													1		
>10													82		

Table Antimicrobial susceptibility testing of Salmonella - S. Infantis in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse Sampling Type: food sample - neck skin Sampling Context: Monitoring

Sampler: HACCP and own check Sampling Strategy: Objective sampling Programme Code: AMR MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

4	AM substance	Carbapenems - Ertapenem	Carbapenems - Imipenem	Carbapenems - Meropenem	Cephalosporins - Cefepime	Cephalosporins - Cefotaxime	Cephalosporins - Cefoxitin	Cephalosporins - Ceftazidime	ß lactamase inhibitores - Cefotaxime + Clavulanic acid	ß lactamase inhibitores - Ceftazidime + Clavulanic acid	Penicillins - Temocillin
	ESBL genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
-	AMPC genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
-	CARBAPENEM genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
-	Cefotaxime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE	NOT AVAILABLE
-	Ceftazidime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE
Ē	ECOFF	0.06	1	0.125	0.125	0.5	8	2	0.5	2	32
ī	Lowest limit	0.015	0.12	0.03	0.06	0.25	0.5	0.25	0.06	0.12	0.5
Ē	Highest limit	2	16	16	32	128	64	128	64	128	64
	N of tested solates	1	1	1	1	1	1	1	1	1	1
	N of resistant solates	0	0	0	0	0	0	0	0	0	0
0.01	5	1									
0.03				1							
0.06	i				1	·	·		1		
0.12			1							1	
0.25						1		1			
							1				
											1

Cephalosporins + Cephalosporins +

Table Antimicrobial susceptibility testing of Salmonella - S. Infantis in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	44	44	44	44	44	44	44	44	44	44	44	44	44	44
	N of resistant isolates	1	0	0	0	0	44	13	0	1	0	44	38	35	2
<=0				43											
0.0				1											
<=0 0.2	.25				43										35
0.2	5	44					13								
<=0 0.5	.5	41			4	39	25	14							7
 <=1					1		25	14		7	42				1
1		1				5	5	17		,	42				
<=2						3	3	11						7	
2		1						11		18	2			•	
4		1						2	6	17				2	
<=8			25												
8									25	1					
>8							1								
16			19						13						
>32															2
64													5	1	
>64										1				34	
>12	8											44			
256													1		
>10	24												38		

Table Antimicrobial susceptibility testing of Salmonella - S. Infantis in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	5	5	5	5	5	5	5	5	5	5	5	5	5	5
МІС	N of resistant isolates	0	0	0	0	0	5	2	0	0	0	5	5	5	0
<=(0.03			5											
<=().25				4										4
<=().5	5				2									
0.5					1		2	1							1
<=											5				
1						3	3	2							
2								2		3					
4									1	2					
<=8	3		2												
8									1						
16			3						3						
>64														5	
>12	18											5			
>10	124												5		

Table Antimicrobial susceptibility testing of Salmonella - S. Infantis in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	7	7	7	7	7	7	7	7	7	7	7	7	7	7
MIC	N of resistant isolates	0	0	0	0	0	7	5	0	1	0	7	7	7	0
<=(0.03			7											
<=().25				6										4
<=().5	7				5									
0.5					1		3								3
<=′											7				
1						2	3	2							
2							1	5		3					
4										3					
<=8	3		2												
8									3						
_16			5						4						
>64										1				7	
>12												7			
>10)24												7		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	0	0	0	0	1	0	0	1	0	1	1	1	0
<=0	.03			1											
<=0	.25				1										1
<=1											1				
1						1		1							
<=8	1		1												
8							1		1						
16		1													
>64										1				1	
>12	8											1			
>10	24												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census progr

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	N of resistant isolates	19	2	0	0	0	27	1	0	28	0	27	19	20	0
<=0.				28											
0.03							1								
<=0.					28			5							26
<=0.		9				4									
0.5							1	16							2
<=1											27				
1						24		6						2	
<=2								1			1			6	
2 <=4								1			1	1			
4=4									14					2	
<=8			26						1**						
8							20		14						
>8							6								
16		16											3		
32		2								1		1	4		
>32		1													
64													1	1	
>64										27				19	
>128			2									26			
256													1		
>102	24												19		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
міс	N of resistant isolates	2	0	0	0	0	2	0	0	2	0	2	2	2	0
<=0	0.03			2											
<=0).25				2										2
<=0).5					1									
0.5								1							
<=1											2				
1						1		1							
4									1						
<=8	3		2												
8							2		1						
16		2													
>64										2				2	
>12	28											2			
>10)24												2		

Table Antimicrobial susceptibility testing of Salmonella - S. Kentucky in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	1	0	0	0	0	1	0	0	1	0	1	1	1	0
<=(0.03			1											
<=().25				1										
0.5								1							1
<=1											1				
1						1									
<=8	3		1												
8									1						
>8							1								
16		1													
>64										1				1	
>12	18											1			
>10	124												1		

Table Antimicrobial susceptibility testing of Salmonella - S. Kentucky in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	1	0	0	0	0	2	0	0	2	0	2	1	1	0
<=(0.03			2											
<=().25				2										2
<=().5	1													
0.5								2							
<=	1										2				
1						2									
<=2	2													1	
4									1						
<=8	3		2												
8							2		1						
16		1											1		
>64	1									2				1	
>12	28											2			
>10)24												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	3	3	3	3	3	3	3	3	3	3	3	3	3	3
міс	N of resistant isolates	0	0	0	0	0	3	0	0	0	0	2	0	1	0
	0.03			3											
	0.25				3			2							3
0.2							2								
<=	0.5	3				3									
0.5							1	1							
<=	1									2	3				
<=	2								1					1	
2										1					
4									2					1	
<=	3		3												
16												1			
32													2		
64													1		
>64	1													1	
>1	28											2			

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census prog

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
міс	N of resistant isolates	0	0	0	0	0	2	0	0	0	0	2	1	0	0
<=0	.03			2											
<=0	.25				2			1							2
0.25	5						2								
<=0	.5	2				2									
0.5								1							
<=1										2	1				
<=2														2	
2											1				
4									2						
<=8			2												
32	-	_	-	-	_	-		-	_	_	_	-	1	_	
>12	8											2			
>10	24												1		

Table Antimicrobial susceptibility testing of Salmonella - S. Kottbus in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	1	0	0	0	0	1	0	0	0
<=0	.03			1											
0.12	!						1								
<=0	.25														1
<=0	.5	1				1									
0.5					1			1							
<=1											1				
<=2									1					1	
2										1					
<=8			1												
16													1		
>12	8											1			

Table Antimicrobial susceptibility testing of Salmonella - S. Kottbus in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	1	0	0	0	0	1	1	1	0
<=(0.03			1											
<=().25				1										1
<=0).5	1				1									
0.5							1								
<=1											1				
1								1							
4										1					
<=8	3		1												
8									1						
>64														1	
>12	18			•						•		1	•	•	
>10	124												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						2								
<=0	.03			2											
<=0	.25				2			1							1
<=0	.5	2				2									
0.5								1							1
<=1										1	2				
<=2	!													2	
2										1					
<=4												2			
<=8			2												
8		•							2	•		•		•	
64													2		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1										1
<=0	.5	1				1									
0.5								1							
<=1										1	1				
<=2														1	
<=4												1			
<=8		•	1	•			•			•	•		•	•	
8	_			·					1	·				·	
128			_	_	_	-		_	_			-	1		

Sampling Strategy: Census

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	6	6	6	6	6	6	6	6	6	6	6	6	6	6
МІС	N of resistant isolates	0	1	0	0	0	1	1	0	0	0	1	1	1	0
	0.015						3								
<=0				6											
0.0							2								
<=0					6			2							5
<=0		6				4									
0.5							1	2							1
<=1						2		4		3	6				
<u>1</u> <=2	.					2		1	1					1	
2								1	ı	1				4	
<=4	<u> </u>											4			
4									1	2					
<=8	3		4										1		
8									2			1		1	
16			1						2						
32			1												
64													2		
>64														1	
128													2		
>12												1			
>10	124												1		

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Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	3	3	3	3	3	3	3	3	3	3	3	3	3	3
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						3								
<=0	.03			3											
<=0	.25				3			2							3
<=0	.5	3				3									
0.5								1							
<=1										2	3				
<=2														3	
2										1					
<=4												3			
4									1						
<=8			3												
8									2						
64													1		
128													2		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census pro

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	3	3	3	3	3	3	3	3	3	3	3	3	3	3
МІС	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=	0.015						2								
<=	0.03			2											
0.0	13						1								
0.0				1											
	0.25				3			1							3
<=	0.5	3				3									
0.5	i							2							
<=	1									1	3				
<=	2													3	
2										2					
<=	4											3			
<=	8		3												
8									3						
64													2		
12	8												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	1	0	0	1	0	1	0	1	0
<=0	.03			1											
<=0	.25				1										
<=0	.5	1				1									
0.5							1								1
<=1											1				
1								1							
<=8			1												
8									1						
32												1			
>64										1				1	
256													1		

Sampling Strategy: Census

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Cephalosporins + Cephalosporins +

Sampler: Official and industry sampling

Analytical Method: Dilution - sensititre

programmes Programme Code: AMR MON pnl2

Country of Origin: Hungary

ESBL	NOT AVAILABLE	NOT AVAILABLE	-		Cefotaxime	Cephalosporins - Cefoxitin	Cephalosporins - Ceftazidime	Cefotaxime + Clavulanic acid	Ceftazidime + Clavulanic acid	Penicillins - Temocillin
	NOT AVAILABLE									
genotype		NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE				
AMPC genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE					
CARBAPENE genotype		NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE				
Cefotaxime synergy test	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE	NOT AVAILABLE					
Ceftazidime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Negative/Absent	NOT AVAILABLE					
ECOFF	0.06	1	0.125	0.125	0.5	8	2	0.5	2	32
Lowest limit	0.015	0.12	0.03	0.06	0.25	0.5	0.25	0.06	0.12	0.5
Highest limit	2	16	16	32	128	64	128	64	128	64
N of tested isolates	1	1	1	1	1	1	1	1	1	1
N of resistant isolates	0	0	0	0	0	0	0	0	0	0
0.015	1									
0.03			1							
0.06		•	•	1	•			1	•	
0.25					1		1			
25		1	·	·	·			·	1	
						1				
										1

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Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	23	23	23	23	23	23	23	23	23	23	23	23	23	23
МІС	N of resistant isolates	0	0	0	0	0	22	1	0	20	0	10	1	20	2
<=0	.015						1								
<=0				21											
0.06				2											
0.12							3								
<=0					23			3							8
<=0		19				22									- 12
0.5							18	9			••				12
<=1		4				4	4	40		1	23				
1 2		4				1	1	10	1					3	1
<=2 2								1	ı	2				ა	
<=4								<u>'</u>				1			
4									16						
<=8			23												
8			-						6						
16												12			
32												5	1		1
>32															1
64													15		
>64										20				20	
128												1	3		
>12												4			
256													3		
>10	24												1		

Table Antimicrobial susceptibility testing of Salmonella - S. Newport in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	4	4	4	4	4	4	4	4	4	4	4	4	4	4
MIC	N of resistant isolates	0	0	0	0	0	4	0	0	4	0	4	0	4	0
<=(0.03			4											
<=().25				4										2
<=().5	4				4									
0.5							4	1							2
<=′											3				
1								3							
2											1				
4									2						
<=8	3		4												
8									2						
32												4			
64													3		
>64										4				4	
128	3												1		

Table Antimicrobial susceptibility testing of Salmonella - S. Newport in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
МІС	N of resistant isolates	0	0	0	0	0	2	0	0	2	0	2	0	2	0
<=0	.03			2											
<=0	.25				2										2
<=0	.5	2				2									
0.5							2	1							
<=1											2				
1								1							
4									1						
<=8			2												
8									1						
32												2			
64													1		
>64										2				2	
128		·				·	·			·		·	1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1										
<=0	.5	1				1									
0.5								1							1
<=1										1	1				
<=2														1	
<=4												1			
4									1						
<=8			1												
64													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.03			1											
0.03	}						1								
<=0	.25				1										1
<=0	.5	1				1									
0.5								1							
<=1										1	1				
<=2														1	
<=4												1			
4									1						
<=8			1												
32	•												1		<u> </u>

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census pro

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.03			1											
0.03	}						1								
<=0	.25				1										1
<=0	.5	1				1									
0.5								1							
<=1										1	1				
<=2														1	
<=4												1			
<=8			1												
8									1						
256	•												1		<u> </u>

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested														
	isolates	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MIC	N of resistant isolates	0	0	0	0	0		0	0		0		4	5	0
		U	U		U	U	4	U	U	1	U	4	4	<u> </u>	U
0.0				6			2								
0.0							1								
<=(6		<u>'</u>	2							3
0.2							3								· ·
<=(6				6	-								
0.5		-				-		3							3
<=′										2	6				
1								1							
<=2	2								1					1	
2										3					
<=4												2			
<=8	3		6												
8									4						
16									1						
64													2		
>64										1				5	
128												3			
>12												1			
>10	124												4		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1										
<=0	.5	1				1									
0.5								1							1
<=1											1				
<=2														1	
2										1					
<=4												1			
4									1						
<=8			1												
256													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census Pr

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	4	4	4	4	4	4	4	4	4	4	4	4	4	4
міс	N of resistant isolates	0	0	0	0	0	1	0	0	1	0	0	0	1	0
<=0	.015						3								
<=0				4											
<=0					4			2							3
<=0		3				4									
0.5							1	1							11
<=1										3	4				
1		1						1							
<=2														3	
<=4												3			
4									3						
<=8	i		4												
8									1						
16												1			
64													3		
>64										1				1	
128													1		

Sampling Strategy: Census

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	4	4	4	4	4	4	4	4	4	4	4	4	4	4
МІС	N of resistant isolates	0	1	0	0	0	1	1	0	0	0	0	3	1	0
<=(4											
0.0							3								
	.25				4			1							1
0.2	5						1								
<=(3				3									
0.5								1							2
<=1										1	4				
1		1				1		1							1
<=2														1	
2								1							
<=4												1			
4										2				1	
<=8			1												
8									2	1		3		1	
16			2						2						
32			1												
64													1	4	
>64													4	1	
512 >10													1		
>10	24												2		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	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	1	1	0	0
<=0.	03			1											
<=0.	25				1			1							1
0.25							1								
<=0.	5	1				1									
<=1										1	1				
<=2														1	
4									1						
<=8			1												
>128												1			
>102	4												1		

Sampling Strategy: Census

Sampling Stage: Farm (not specified)

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested														
	isolates	22	22	22	22	22	22	22	22	22	22	22	22	22	22
MIC	N of resistant isolates	•	0	0	0	0	22	4	0	3	0	22	0		0
		0	U		U	U	22	1	U	ა	U		U	1	
<=0 0.12				22			q								
<=0.12					21		9	12							22
0.2					21		11	12							
<=0.23		20				22	11								
0.5		20			1	22	2	6							
<=1								<u> </u>		13	21				
1		2						3							
<=2		_						•	2					19	
2										4	1				
4								1	13	2				2	
<=8			21												
8									6						
16			1						1						
32													5		
64													12		
>64										3				1	
128													4		
>12												22			
256													1		

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Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census prog

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	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	1	1	0	0
<=0.	.03			1											
<=0.	.25				1			1							1
0.25	5						1								
<=0.	.5	1				1									
<=1										1	1				
<=2														1	
4									1						
<=8			1												
128												1			
1024	4				·						·		1		

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	15	15	15	15	15	15	15	15	15	15	15	15	15	15
МІС	N of resistant isolates	1	0	0	0	0	15	0	0	1	0	15	2	2	0
<=0	.03			15											
0.12							8								
<=0					15			4							13
0.2							7								
<=0		14				15									
0.5								9							2
<=1										9	13				
1								2							
<=2									1					13	
2										5	2				
4									13						
<=8			15												
8									1						
32		1											1		
64													11	1	
>64										1				1	
128													1		
>12												15			
>10	24												2		

Table Antimicrobial susceptibility testing of Salmonella - S. Stanley in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	7	7	7	7	7	7	7	7	7	7	7	7	7	7
MIC	N of resistant isolates	0	0	0	0	0	7	0	0	0	0	7	2	0	0
	0.03			7											
0.1							3								
).25				7			2							7
0.2							3								
<=(6				7									
0.5							1	3							
<=1										4	7				
1								2							
<=2	2								2					7	
2		1								2					
4									3	1					
<=8	3		7												
8									2						
32													2		
64	-											_	3		
>12												7			
>10)24												2		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	4	4	4	4	4	4	4	4	4	4	4	4	4	4
MIC	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=(0.015						4								
<=(0.03			4											
<=().25				4			2							1
<=().5	4				4									
0.5								2							3
<=1										2	4				
<=2	2													4	
2										2					
<=4												4			
<=8	3		3												
8									4						
16			1												
64													3		
128													1		

Table Antimicrobial susceptibility testing of Salmonella - S. Tennessee in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1										
<=0	.5	1				1									
0.5															1
<=1											1				
1								1							
2										1					
<=4												1			
4														1	
8									1						
16			1												
128													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.015						1								
<=0	.03			1											
<=0	.25				1										1
<=0	.5	1				1									
0.5								1							
<=1											1				
<=2														1	
2										1					
<=4												1			
4	•					·			1	·				·	
<=8	•		1		•	•			•	•			•	•	
64													1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	N of resistant isolates	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<=0	.03			1											
0.03	3						1								
<=0	.25				1			1							1
<=0	.5	1				1									
<=1											1				
<=2														1	
2										1					
<=4												1			
4									1						
<=8			1												
32	•	•											1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	2	2	2	2	2	2	2	2	2	2	2	2	2	2
MIC	N of resistant isolates	0	0	0	0	0	1	0	0	2	0	0	1	1	1
<=0	.015						1								
<=0				1											
0.0				1											
<=0					2			1							1
<=0		2				2									
0.5								1							
<=1											2				
<=2														1	
2							1								
<=4												1			
4									1						
<=8			2												
8												1			
16									1						
32													1		
>32															1
64										1					
>64										1				1	
>10	24												1		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census progr Progr

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	7	7	7	7	7	7	7	7	7	7	7	7	7	7
MIC	N of resistant isolates	0	0	0	0	0	1	0	0	1	0	0	2	2	0
<=(0.015						1								
<=(0.03			7											
0.0							5								
0.1	2						1								
).25				6			3							7
<=().5	5				7									
0.5					1			3							
<=1										4	6				
1		1						1							
<=2	2													5	
2		1								2	1				
<=4												4			
4									4						
<=8	3		7												
8									2			3			
16									1					2	
32										1					
64													4		
128													1		
>10	124												2		

Sampling Type: environmental sample (not specified)

Sampling Context: Control and eradication

Sampler: Official and industry sampling

Sampling Strategy: Census Pr

programmes Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested isolates	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MIC	N of resistant isolates	0	0	0	0	0	1	0	0	0	0	1	1	1	1
<=0	.03			1											
0.12	1						1								
<=0	.25				1										
<=0	.5	1				1									
0.5								1							
<=1											1				
2										1					
4									1						
<=8			1												
>32															1
>64														1	
>12	8											1			
>10	24												1		

Table Antimicrobial susceptibility testing of Salmonella - S. Virchow in Meat from turkey - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - meat

Sampling Context: Monitoring

Sampler: HACCP and own check

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.5	2	0.064	1	16	8	2	16	256	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	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	1	1	1	1
<=0	.03			1											
0.12	!						1								
<=0	.25				1										
<=0	.5	1				1									
0.5								1							
<=1										1	1				
4									1						
<=8			1												
>32															1
>64														1	
128	•		•	•							•	1	•	•	
>10	24												1		

ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic - E.coli, non-pathogenic, unspecified in Turkeys - fattening flocks (not specified)

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

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

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Carbapenems - Ertapenem	Carbapenems - Imipenem	Carbapenems - Meropenem	Cephalosporins - Cefepime	Cephalosporins - Cefotaxime	Cephalosporins - Cefoxitin	Cephalosporins - Ceftazidime	inhibitores - Cefot	s + ß lactamase axime + Clavulanic id	Cephalosporins + ß lactamase inhibitores - Ceftazidime + Clavulanic acid	Penicillins - Temocillin
	ESBL genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AV	AILABLE	NOT AVAILABLE	NOT AVAILABLE
	AMPC genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AV	AILABLE	NOT AVAILABLE	NOT AVAILABLE
	CARBAPENEM genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AV	AILABLE	NOT AVAILABLE	NOT AVAILABLE
	Cefotaxime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Positive/Present	Negative/Absent	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	Negative/Absent	NOT AVAILABLE
	ECOFF	0.06	0.5	0.125	0.125	0.25	8	0.5	0.25	0.25	0.5	32
	Lowest limit	0.015	0.12	0.03	0.06	0.25	0.5	0.25	0.06	0.06	0.12	0.5
	Highest limit	2	16	16	32	64	64	128	64	64	128	64
	N of tested isolates	4	4	4	4	4	4	4	4	4	4	4
MIC	N of resistant isolates	0	0	0	2	3	2	3	2	2	3	0
<=0.0)15	1										
<=0.0)3			4								
0.03		1										
<=0.0	06				1				1	1		
0.06	10	2	0								4	
<=0.1 0.12			3		1						1	
<=0.2					ı ı	1		1				
0.25	-0		1		1							
2			<u> </u>								2	
4						1		1		1		2
8					1	1	2	1		1	1	2
16			·			1	·	1			·	
32							1					
64							1					

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic - E.coli, non-pathogenic, unspecified in Turkeys - fattening flocks (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.25	0.5	0.064	1	16	8	2	16	64	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested														
	isolates	169	170	170	170	170	170	170	170	170	170	170	170	170	170
	N of resistant isolates	11	32	0	3	3	107	1	3	104	0	90	86	109	34
<=0			32		<u>_</u>	<u>_</u>		<u> </u>	<u> </u>	104	<u> </u>	90	00	109	34
<=0				169			51								
0.03				109			10								
0.06				1			2								
0.12							3								
<=0					167			132							71
0.25							25								
<=0		80				167									
0.5							11	32							53
<=1										3	166				
1		76					9	5							12
<=2									33					58	
2		2				1	2	1		32	4				
<=4												62			
4		1			2	1	6		83	26				2	
>4					1										
<=8			131										17		
8						1	21		46	5		13		1	
>8							30		-						
16 32		3	7						5			5	27	1	
32		3	1						11			4	25	4	1
>32 64		4								4			45		33
>64			6						2	100		6	15	28 76	
128			12						2	100		15	3	76	
>128			13									65	3		
256			13									- 03	3		
512													2		
102													9		
>10													69		

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic - E.coli, non-pathogenic, unspecified in Gallus gallus (fowl) - broilers (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON pnl2

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Carbapenems - Ertapenem	Carbapenems - Imipenem	Carbapenems - Meropenem	Cephalosporins - Cefepime	Cephalosporins - Cefotaxime	Cephalosporins - Cefoxitin	Cephalosporins - Ceftazidime	inhibitores - Cefot	s + ß lactamase axime + Clavulanic id	inhibitores - Cefta:	s + ß lactamase zidime + Clavulanic cid	Penicillins - Temocillin
	ESBL genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AV	AILABLE	NOT AV	AILABLE	NOT AVAILABLE
	AMPC genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AV	AILABLE	NOT AV	AILABLE	NOT AVAILABLE
	CARBAPENEM genotype	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AV	AILABLE	NOT AV	AILABLE	NOT AVAILABLE
	Cefotaxime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Positive/Present	Negative/Absent	NOT AV	AILABLE	NOT AVAILABLE
	Ceftazidime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Positive/Present	Negative/Absent	NOT AVAILABLE
	ECOFF	0.06	0.5	0.125	0.125	0.25	8	0.5	0.25	0.25	0.5	0.5	32
	Lowest limit	0.015	0.12	0.03	0.06	0.25	0.5	0.25	0.06	0.06	0.12	0.12	0.5
	Highest limit	2	16	16	32	64	64	128	64	64	128	128	64
	N of tested isolates	5	5	5	5	5	5	5	5	5	5	5	5
MIC	N of resistant isolates	0	0	0	4	5	3	5	3	3	3	3	0
<=0.0)15	2											
<=0.0)3			5									
0.03		1											
<=0.0	06								2				
0.06		2											
<=0.1	12		4		4						2		
0.12			1		3								
1			<u> </u>		ა	1		1					
2					1	'	1	ı				1	
4							1			2			1
8						3		2		1		2	4
16						1		2					
64							3						

Table Antimicrobial susceptibility testing of Escherichia coli, non-pathogenic - E.coli, non-pathogenic, unspecified in Gallus gallus (fowl) - broilers (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: animal sample - caecum

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Dilution - sensititre

Country of Origin: Hungary

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Carbapenems - Meropenem	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Glycylcyclines - Tigecycline	Macrolides - Azithromycin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	2	16	0.125	0.25	0.5	0.064	1	16	8	2	16	64	8	2
	Lowest limit	0.5	8	0.03	0.25	0.5	0.015	0.25	2	1	1	4	8	2	0.25
	Highest limit	32	128	16	4	8	8	8	64	64	16	128	1024	64	32
	N of tested														
	isolates	170	170	170	170	170	170	170	170	170	170	170	170	170	170
	N of resistant isolates	9	16	0	5	5	124	1	8	73	0	125	74	67	40
<=0							43		-						
<=0				168											
0.03							1								
0.06				1			2								
0.12				1			4								
<=0	.25				165			143							79
0.25							35								
<=0		82				165									
0.5							16	22							42
<=1										1	163				
1		76			1	1	15	4							8
<=2								<u> </u>	27	- 10	7			100	
2		3			1		3	1		43	/	42			1
<=4 4		1			1	1	5		71	48		42		1	
>4					2	ı	3		71	40				ı	
<=8			143		2								20		
8		2	140			2	17		54	5		1	20	2	
>8		-				1	29		0.						
16			11						10			2	29		
32		1	1						5				38	1	1
>32		5													39
>32 64			3						2	7		12	9	20	
>64									1	66				46	
128			8									34			
>12			4									79			
256													1		
102													6		
>10	24												67		

OTHER ANTIMICROBIAL RESISTANCE TABLES