ZOONOSES MONITORING

Latvia

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

PREFACE

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

The report contains information on trends and sources of zoonoses and zoonotic agents in Latvia 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.

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

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1 ANIMAL POPULATIONS

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

1.1.1 Information on susceptible animal population

Sources of information

Agricultural Data Centre (ADC)ADC is a state agency under the supervision of the Ministry of Agriculture that performs collection, processing and analysis of zootechnical, veterinary and agricultural data in the Latvia and develop a uniform register of animals and herds (cattle, pigs, sheep, goats etc.) and a pedigree information system according to international standards.

Dates the figures relate to and the content of the figures

Data on commercial poultry - average population during the year.

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

Animals - cattle, pigs, sheep, goats, horses, rabbits, swamp beaver, fur animals, poultry, bee gardens, fishponds, hatcheries of aquatic animals, wild animals and birds, which are kept in a holding.Herd - an agricultural animal or group of animals belonging to one owner.Holding - shall mean separate confined area in which animals are kept regularly or temporary.Poultry - shall mean fowl, turkeys, guinea fowl, ducks, geese, quails, pigeons, pheasants, partridges, ratites and etc. birds reared or kept in captivity for breeding, the production of meat or eggs for consumption, or for re-stocking supplies of game.Day-old chicks - poultry less than 72 hours old, not yet fed; except muscovy ducks (Cairina moschata) or their crosses may be fed and ratites (Ratitae) less than 5 days old, not yet fed.Commercial poultry - poultry 72 hours old or more, reared for the production and sale for trade or to companies of meat and/or eggs for consumption, or for restocking supplies of game.Poultry flock - all poultry of the same health status kept on the same premises or in the same enclosure and constituting a single epidemiological unit. In housed poultry this will include all birds sharing the same airspace.

Geographical distribution and size distribution of the herds, flocks and holdings

Animals and herds are distributed almost evenly over the whole territory of Latvia. Concerning commercial poultry population, there are two districts, where the holdings with biggest numbers of birds are located, both in the centre/southern centre of Latvia.

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

The use of intradermal tuberculin tests for diagnosis of bovine tuberculosis in Latvia has started in 1927. In the pre-war period, intradermal tuberculin tests were not compulsory and were done on a voluntary basis. In 1937, 10.4% of the tested cows were found positive. After the Second World War private farms were eliminated. The majority of animals were moved to collective holdings, where infected and non-infected animals were kept together, and tuberculosis continued to spread. Since tuberculosis preventive measures were introduced after 1960, the number of newly infected herds decreased. The tuberculosis eradication programme for domestic animals was introduced in 1968. Also testing of pigs, sheep, cats, birds and shepherd dogs was introduced with the aim to identify the sources of infection.

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

Since 1975, bovine tuberculosis was diagnosed only in 7 herds:-1 herd in 1977-1 herd in 1978-2 herds in 1980-2 herds in 1981-1 herd in 1989

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

In 2014, no human infection with M. bovis was detected.

2.1.2 Mycobacterium in animals

2.1.2.1 M. bovis in animal - Deer - farmed

Additional information

In 2014, there was no program in place for control of Mycobacterium bovis in farmed deer in Latvia.

2.1.2.2 Mycobacterium spp., unspecified in animal - Pigs - Farm

Monitoring system

Sampling strategy

Tissue from suspect animals in slaughterhouses.

Frequency of the sampling

According to the national control programme, all pigs slaughtered have been subject to an official post mortem examination.

Type of specimen taken

Tissue from suspect animals in slaughterhouses.

Methods of sampling (description of sampling techniques)

For bacteriological examination of tissue from suspect animals: Classical bacteriology - OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2014.

Case definition

A single animal from which M.bovis or M.avium has been isolated.

Vaccination policy

Vaccination is prohibited.

Notification system in place

According to The Veterinary Medicine Law, animal owner/keeper must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal is affected by infectious disease.Also the Directive 2003/99/EC is implemented into national law by Regulation of the Cabinet of Ministers Nr. 744, 5 September 2006 "Procedures for surveillance and exchange of information of such infectiuos diseases as to which both animals and humans are susceptible, and of the antimicrobial resistance of agents".

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

Status as officially free of bovine tuberculosis during the reporting year

The entire country free

From 2011 Latvija is officially free bovine tuberculosis country.

Monitoring system

Sampling strategy

Latvia has a national control programme in place to control tuberculosis in bovines. The programme is based on the Regulation of Cabinet of Ministers Nr. 298, 21 April 2006 "Procedures for prevention and combatting of such infectious diseases as to which both animals and humans are susceptible".

Frequency of the sampling

100% of stock bulls are tested annually by using intradermal tuberculin test. Also according to the national control programme, all bovine animals slaughtered have been subject to an official post mortem examination in accordance with provisions of Section I (2c) of Annex A to Directive 64/432/EEC, i.e., bovine tuberculosis surveillance are carried out through an official post-mortem examination in slaughterhouses.

Type of specimen taken

Intradermal tuberculin test.Tissue from suspect animals in slaughterhouses or animals positive in the intradermal tuberculin test.

Case definition

A single animal from wich M. bovis has been isolated.

Diagnostic/analytical methods used

For bacteriological examination of tissue from suspect animals in slaughterhouses or animals positive in the intradermal test: Classical bacteriology - OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2014, Chapter 2.4.7.

Vaccination policy

Vaccination is prohibited.

Measures in case of the positive findings or single cases

According to The Veterinary Medicine Law, animal owner/keeper must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal is affected by infectious disease. Measures applied in cases of suspicion or confirmation of a disease is in accordance with Council Directive No 64/432/EEC of 26 June 1964, Council Directive No 78/52/EEC of 13 December 1977 and Council Directive No 77/391/EEC of 17 May 1977, implemented by Regulation of Cabinet of Ministers Nr. 298, 21 April 2006, "Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible.According to Regulation of Cabinet of Ministers No 298, 21 April 2006 "Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible" if an infection with a zoonotic agent is suspected, this shall be notified by animal owner/keeper, person in charge from laboratory to veterinarian or to regional office of the Food and Veterinary Service. The regional office then informs the Veterinary Surveillance Department of the Food and Veterinary Service. State veterinary inspectors carry out further epidemiological investigation and take appropriate measures to prevent spread of the disease.Measures to be implemented at suspected holding includes:1) Movement restrictions on the animals; 2) Live animals are not allowed to leave holding except for slaughter;3) Listing all suspect animals;4) Isolating of suspect or positive reacted animals; 5) Restrictions on the trade of milk and milk products;6) Control of staff, visitors and vehicles; 7) Control of feed and water supply;8) Control of the removal of manure;9) Vermin control;10) Carrying out tests with the bovine tuberculin at the holding.In case of a positive reaction to the repeated test, the animal shall be intended for slaughter, the viscera thereof shall be removed and submitted for investigation to the authorised laboratory and additionally the following measures shall apply at the holding:1) Slaughter of positive bovine animals at least within 30 days upon detection;2) Slaughtering of animals shall be carried out in accordance with Community legislation on food hygiene. Products derived from such animals may be placed on the market for human consumption in accordance with Community legislation on food hygiene;3) The premises and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of an authorised veterinarian or state veterinary inspector; 4) Bedding and other materials that may be contaminated with disease agents are disinfected under the supervision of an authorised veterinarian or state veterinary inspector; manure are disinfected or subjected to treatment in accordance with Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation);5) Other disease eradication measures in the affected holding.Restrictions are lifted by a State veterinary inspector after the above measures have been taken and all animals over six weeks of age have reacted negatively to at least two consecutive tuberculin tests, the first no less than 60 days and the second no less than four months and no more than 12 months after the removal of the last positive reactor. Costs of eradication of bovine tuberculosis are compensated according to Regulation of Cabinet of Ministers No 177, 13 March 2005, Procedure for payment of compensations to owners of animals which have arise due to eradication of epizootic diseases or animal infectious diseases, which are under state supervision.

Notification system in place

According to The Veterinary Medicine Law, animal owner/keeper must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal is affected by infectious disease. According to Regulation of Cabinet of Ministers No 298, 21 April 2006 "Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible" if an infection with a zoonotic agent is suspected, this shall be notified by animal owner/keeper, person in charge from laboratory to veterinarian or to regional office of the Food and Veterinary Service. The regional office then informs the Veterinary Surveillance Department of the Food and Veterinary Service. State veterinary inspectors carry out further epidemiological investigation and take appropriate measures to prevent spread of the disease.Also the Directive 2003/99/EC is implemented into national law by Regulation of the Cabinet of Ministers Nr. 744, 5 September 2006 "Procedures for surveillance and exchange of information of such infectiuos diseases as to which both animals and humans are susceptible, and of the antimicrobial resistance of agents"

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

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

The last time that bovine brucellosis was diagnosed in Latvia was in 1963. Vaccination has never been used as an instrument in brucellosis eradication and control. Brucella melitensis has never been detected in Latvia at all. Brucellosis in pigs was first detected in Latvia in 1981. From 1981 till 1994 porcine brucellosis were detected in 36 holdings. Since then till 2010, no cases of brucellosis in pigs has been detected. At the end of 2010 sporadic case of porcine brucellosis was detected in the one holding. Preventive vaccination of animals and usage of hyper - immune serum against brucellosis is prohibited. Abortions have to be reported. They are investigated bacteriologically.

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

As Latvia has been free of bovine brucellosis since 1963, and the status of freedom from brucellosis is controlled by the responsible authority, brucellosis is not considered to pose a risk on animal or human health.

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

Since 1988, no cases of human brucellosis have been registered.

2.2.2 Brucella in animals

2.2.2.1 B. suis in animal - Pigs - Farm

Monitoring system

Sampling strategy

Programme is based on Regulation of Cabinet of Ministers No 63 of 29 January 2013 "Procedures for the prevention and eradication of brucellosis in swine".

Frequency of the sampling

All breeding boars that are used for artificial insemination are tested once per year. For the getting of officially free status sows, young sows and breeding boars that are used for breeding in the own herd are tested as follows: sows - once per two years 100% animals, young sows - before insemination 100% animals and breeding boars - are tested once per year. For the maintain of officially free status sows and breeding boars are tested as follows: sows - 10% of previously non tested sows per year, breeding boars - once per year.

Type of specimen taken

Blood

Case definition

If the RBT is positive, the animal is tested serologically again. If the second testing (Complement Fixation Test) also reveals positive results, the animal is slaughtered and tissues are submitted for bacteriological examination. If B. suis can be isolated, the animal and the herd, respectively, is considered positive.

Diagnostic/analytical methods used

Rose Bengal Test Complement Fixation TestClassical bacteriology (OIE Manual)

Vaccination policy

Vaccination is prohibited.

Measures in case of the positive findings or single cases

According to The Veterinary Medicine Law, animal owner/keeper must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal is affected by infectious disease. According to Regulation of Cabinet of Ministers No 298, 21 April 2006 "Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible" if an infection with a zoonotic agent is suspected, this shall be notified by animal owner/keeper, person in charge from laboratory to veterinarian or to regional office of the Food and Veterinary Service. The regional office then informs the Veterinary Surveillance Department of the Food and Veterinary Service. State veterinary inspectors carry out further epidemiological investigation and take appropriate measures to prevent spread of the disease.Measures to be implemented at suspected holding includes:1) Movement restrictions on the animals; 2) Live animals are not allowed to leave holding except for slaughter;3) Listing of all suspect animals;4) Control of staff, visitors and vehicles; 5) Control of feed and water supply;6) Control of the removal of manure;7) Vermin control;8) Sampling of animals for further investigation.In case of confirmed diagnosis additionally the following measures shall apply at the holding:1) Slaughtering or destroying of serologically positive animals;2) Slaughtering of serologically negative animals;3) Slaughtering of animals shall be carried out in accordance with Community legislation on food hygiene. Products derived from such animals may be placed on the market for human consumption in accordance with Community legislation on food hygiene;4) The premises and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of a veterinarian or State veterinary inspector; 5) Bedding and other materials that may be contaminated with disease agents are disinfected under the supervision of a veterinarian or state veterinary inspector; manure are disinfected or subjected to biothermic treatment;6) Foetuses, still-born piglets are destroyed in accordance with Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation). 7) Other disease eradication measures in the affected holding.Restrictions are lifted by a State veterinary inspector if all porcine animals present in the herd at the time of the outbreak have been slaughtered or destroyed and final cleaning and desinfection are finished.

Notification system in place

According to The Veterinary Medicine Law, animal owner/keeper must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal is affected by infectious disease. According to Regulation of Cabinet of Ministers No 298, 21 April 2006 "Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible" if an infection with a zoonotic agent is suspected, this shall be notified by animal owner/keeper, person in charge from laboratory to veterinarian or to regional office of the Food and Veterinary Service. The regional office then informs the Veterinary Surveillance Department of the Food and Veterinary Service. State veterinary inspectors carry out further epidemiological investigation and take appropriate measures to prevent spread of the disease.Also the Directive 2003/99/EC is implemented into national law by Regulation of the Cabinet of Ministers Nr. 744, 5 September 2006 "Procedures for surveillance and exchange of information of such infectiuos diseases as to which both animals and humans are susceptible, and of the antimicrobial resistance of agents"

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

Brucellosis in pigs was first detected in Latvia in 1981. From 1981 till 1994 porcine brucellosis were detected in 36 holdings. Since then till 2010, no cases of brucellosis in pigs has been detected. At the end of 2010 sporadic case of porcine brucellosis was detected in the one holding.

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

Status as officially free of bovine brucellosis during the reporting year

The entire country free

Latvia is officially free from bovine brucellosis. Since 1963 no registered cases of bovine brucellosis in Latvia.

Monitoring system

Sampling strategy

Sampling is part of a national control programme and takes place on farm. The programme is based on the Council Directive No 64/432/EEC of 26 June 1964 on health problems affecting intra-Community trade in bovine animals and swine, on the Annex A Part II. As well as programme is based on Regulation of Cabinet of Ministers No 881 of 18 December 2012 Procedures for the implementation of prevention and eradication measures of brucellosis in bovine animals.

Frequency of the sampling

100% of the stock bulls are tested on brucellosis annually. Also according to the national control programme all cattle herds must be tested once per five years, i.e. every year are tested 20% of total number of cattle holdings.

Type of specimen taken

Milk/blood

Methods of sampling (description of sampling techniques)

Samples are taken on the farm.

Case definition

An animal is considered to be infected when the individual blood sample is positive in the complement fixation test or in the agglutination.

Diagnostic/analytical methods used

Serological tests are carried out by using the Rose-Bengal-Test (RBT) on blood serum samples for a first screening in cases that no milk is available or the number of animals is very low. In bigger dairy herds, bulk tank milk samples are tested by using ELISA. If blood samples turn out positive in the RBT or bulk milk samples after the ELISA, individual serological testing has to be carried out on each animal.

Vaccination policy

Vaccination is prohibited.

Measures in case of the positive findings or single cases

According to The Veterinary Medicine Law, animal owner/keeper must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal is affected by infectious disease. Measures applied in cases of suspicion or confirmation of a disease is in accordance with Council Directive No 64/432/EEC of 26 June 1964, Council Directive No 78/52/EEC of 13 December 1977 and Council Directive No 77/391/EEC of 17 May 1977, implemented by Regulation of Cabinet of Ministers Nr. 298, 21 April 2006, "Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible.According to Regulation of Cabinet of Ministers No 881, 18 December 2012 "Procedure for prevention and eradication of brucellosis in bovine animals" following measures are taken:Measures to be implemented at suspected holding includes:1) Movement restrictions on the animals; 2) Live animals are not allowed to leave holding except for slaughter;3) Listing all suspect animals;4) Restrictions on the trade of milk and milk products;5) Control of staff, visitors and vehicles; 6) Control of feed and water supply;7) Control of the removal of manure;8) Vermin control;9) Sampling of animals for further investigation.In case of confirmed diagnosis additionally the following measures shall apply at the holding:1) Slaughter of positive bovine animals at least within 30 days upon detection;2) Slaughtering of animals shall be carried out in accordance with Community legislation on food hygiene. Products derived from such animals may be placed on the market for human consumption in accordance with Community legislation on food hygiene;3) The premises and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of an authorised veterinarian or state veterinary inspector; 4) Bedding and other materials that may be contaminated with disease agents are disinfected under the supervision of an authorised veterinarian or state veterinary inspector; manure are disinfected or subjected to biothermic treatment;5) Foetuses, still-born calves, calves which have died from brucellosis is destroyed in accordance with Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation). 6) Other disease eradication measures in the affected holding.Restrictions are lifted by a State veterinary inspector if all bovine animals present in the herd at the time of the outbreak have been slaughtered, or two serological tests of all bovine animals over 12 months old show negative results (the first test is to be carried out at least 30 days after the removal of the positive animal and the second at least 60 days later) and above listed measures have been taken.

Notification system in place

According to The Veterinary Medicine Law, animal owner/keeper must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal is affected by infectious disease. Also the Directive 2003/99/EC is implemented into national law by Regulation of the Cabinet of Ministers Nr. 744, 5 September 2006 "Procedures for surveillance and exchange of information of such infectiuos diseases as to which both animals and humans are susceptible, and of the antimicrobial resistance of agents"

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

As Latvia has been free of bovine brucellosis since 1963, and the status of freedom from brucellosis is controlled by the responsible authority, brucellosis is not considered to pose a risk on animal or human health.

2.2.2.3 B. melitensis in animal - Goats

Status as officially free of caprine brucellosis during the reporting year

The entire country free

Latvia is officialy free country from Brucella melitensis.

Additional information

Brucella melitensis has never been detected in Latvia at all.

Monitoring system

Sampling strategy

In 2014, according to the national control programme, 5% of the total number of goats older than 6 months were tested on brucellosis. Programme is based on Regulation of Cabinet of Ministers No 988 of 20 December 2011 "Procedures for the prevention and eradication of brucellosis in sheep and goats ".

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 when the individual blood sample is positive in the RBT. In that case, the whole herd is considered to be infected.

Diagnostic/analytical methods used

Blood serum samples are tested by RBT.

Vaccination policy

Vaccination is prohibited.

Measures in case of the positive findings or single cases

See B. abortus in bovines.

Notification system in place

See B. abortus in bovines.

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

As no case of B. melitensis has ever been detected in Latvia, it does not pose a risk on animal and human health.

2.2.2.4 B. melitensis in animal - Sheep

Status as officially free of ovine brucellosis during the reporting year

The entire country free

Latvia is officialy free country from Brucella melitensis.

Additional information

B. melitensis has never been detected in Latvia at all.

Monitoring system

Sampling strategy

In 2014, according to the national control programme, 5% of the total number of sheep older than 6 months were tested on brucellosis. Programme is based on Regulation of Cabinet of Ministers No 988 of 20 December 2011 "Procedures for the prevention and eradication of brucellosis in sheep and goats ".

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 when the individual blood sample is positive.

Diagnostic/analytical methods used

Blood serum samples are tested by RBT or CFT.

Vaccination policy

Vaccination is prohibited.

Measures in case of the positive findings or single cases

See B. abortus in bovines

Notification system in place

See B. abortus in bovines.

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

As no case of B. melitensis has ever been detected in Latvia, it does not pose a risk on animal and human health.

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

The prevalence of Salmonella in animals and food of animal origin has been monitored over a long period of time. From 1967 until the end of 2003, 51836 Salmonella isolates were obtained from animal samples. Most isolates originated from poultry (57,6%) and from pigs (29,0%). In cattle and fur animals, Salmonella was isolated in lower numbers, 8,6% and 2,7%, respectively. Goats (0,05%), horses (0,01%) and other animals (2,0%) were also investigated.The main serotypes found in poultry in the same period of time (1967-2003) were S. Gallinarum-pullorum (87,1%), S. Enteritidis (9,6% of isolates) and S. Typhimurium (2,8%). In pigs, besides S. Choleraesuis (94,0%), mainly S. Typhimurium was found (0,8%), while in cattle S. Enteritidis (57,9%) and S. Dublin (35,4%) were the most prominent serotypes. In fur animals, four different serotypes were isolated: S. Choleraesuis (29,9%), S. Dublin (23,5%), S. Enteritidis (22,5%) and S. Typhimurium (20,6%).

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

S. Enteritidis is the most prevalent serotype isolated from poultry and also from poultry meat. Accordingly, also human cases of S. Enteritidis-caused illness prevail during the last years. The increase in the number of human salmonellosis cases is predominantly reported during the summer months.

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

At meat processing plant

At retail

One sample consists of 5 sample units. For laboratory testing 10/25 g of each unit are taken for further investigations.

Frequency of the sampling

At retail

Sampling distributed evenly throughout the year

Type of specimen taken

At retail

Other: meat preparations/meat products

Methods of sampling (description of sampling techniques)

At retail

According to regulation 2073/2005.

Definition of positive finding

At retail

None of the units is allowed to contain Salmonella spp. The sample is considered positive, if one or more of the units are positive.

Diagnostic/analytical methods used

At retail

Other: LVS EN ISO 6579 : 2003.

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

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

At meat processing plant

Inspectors of the Food and Veterinary Service are taking the samples. One sample consists of 5 units. Every unit is packed and stored separately, and also laboratory testing is performed on each unit. For laboratory testing, 25g of each unit are taken for further investigations.

At retail

Inspectors of the Food and Veterinary Service are taking the samples. One sample consists of 5 units. Every unit is packed and stored separately, and also laboratory testing is performed on each unit. For laboratory testing, 25g of each unit are taken for further investigations.

Frequency of the sampling

At meat processing plant

Sampling distributed evenly throughout the year

At retail

Sampling distributed evenly throughout the year

Type of specimen taken

At meat processing plant

At retail

Methods of sampling (description of sampling techniques)

At meat processing plant

Method according to regulation 2073/2005.

At retail

Method according to regulation 2073/2005.

Definition of positive finding

At meat processing plant

None of the units is allowed to contain Salmonella spp. The sampleis considered positive, if one or more of the units are positive.

At retail

None of the units is allowed to contain Salmonella spp. The sampleis considered positive, if one or more of the units are positive.

Diagnostic/analytical methods used

At meat processing plant

LVS EN ISO 6579:2003

At retail

LVS EN ISO 6579:2003

Control program/mechanisms

The control program/strategies in place

National control programme on Salmonella, based on the Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified foodborne zoonotic agents.

Measures in case of the positive findings or single cases

The inspector immediately has to perform an inspection at the slaughterhouse, processing plant or at the store. He decides what to do with the rest of the batch, if there are still products left, and collects all necessary documents to clarify the origin of the product. The inspector also decides on the actions that have to be taken in the company, like asking for HACCP system improvements etc. Disinfection has to be carried out at all places where the infected product had contact with.

3.1.2.3 Salmonella spp. in food - Meat from pig

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

At meat processing plant

Inspectors of the Food and Veterinary Service are taking the samples. One sample consists of 5 units. Every unit is packed and stored separately, and also laboratory testing is performed on each unit. For laboratory testing, 10/25g of each unit are taken for further investigations.

At retail

Inspectors of the Food and Veterinary Service are taking the samples. One sample consists of 5 units. Every unit is packed and stored separately, and also laboratory testing is performed on each unit. For laboratory testing, 10/25g of each unit are taken for further investigations.

Frequency of the sampling

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

Surface of carcass

At meat processing plant

At retail

Minced meat, meat preparations

Methods of sampling (description of sampling techniques)

At meat processing plant

Method according to regulation 2073/2005

At retail

Method according to regulation 2073/2005.

Definition of positive finding

At meat processing plant

None of the units is allowed to contain Salmonella spp. The sampleis considered positive, if one or more of the units are positive.

At retail

None of the units is allowed to contain Salmonella spp. The sampleis considered positive, if one or more of the units are positive.

Diagnostic/analytical methods used

At meat processing plant

LVS EN ISO 6579:2003

At retail

LVS EN ISO 6579:2003

Control program/mechanisms

The control program/strategies in place

National control programme on Salmonella, based on the Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified foodborne zoonotic agents.

Measures in case of the positive findings or single cases

The inspector immediatly has to perform an inspection at the processing plant or at the store. He decides what to do with the rest of the batch, if there are still products left, and collects all necessary documents to clarify the origin of the product. The inspector also decides on the actions that have to be taken in the company, like asking for HACCP system improvements etc. Disinfection has to be carried out at all places where the infected product had contact with.

3.1.2.4 Salmonella spp. in food - Eggs

Monitoring system

Sampling strategy

Inspectors of the Food and Veterinary Service are taking samples of raw liquid eggs at production plant. One sample consists of 5 units. Every unit is packed and stored separately, and also laboratory testing is performed on each unit. For laboratory testing, 25g of each unit are taken for further investigations.

Frequency of the sampling

Raw material for egg products (at production plant)

Sampling distributed evenly throughout the year

Egg products (at production plant and at retail)

Type of specimen taken

Raw material for egg products (at production plant)

Mixture of yolk and white

Methods of sampling (description of sampling techniques)

Raw material for egg products (at production plant)

Method according to Regulation No 2073/2005

Definition of positive finding

Raw material for egg products (at production plant)

None of the units is allowed to contain Salmonella spp. The sample is considered positive, if one or more of the units are positive.

Diagnostic/analytical methods used

Raw material for egg products (at production plant)

Bacteriological method: ISO 6579:2002

Control program/mechanisms

The control program/strategies in place

National control programme on Salmonella, based on the Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified foodborne zoonotic agents.

Measures in case of the positive findings

The inspector immediately has to perform an inspection at the production plant or at the store. He decides what to do with the rest of the batch, if there are still products left, and collects all necessary documents to clarify the origin of the product. The inspector also decides on the actions that have to be taken in the company, like asking for HACCP system improvements etc. Disinfection has to be carried out at all places where the infected product had contact with.

Additional information

3.1.3 Salmonella in animals

3.1.3.1 Salmonella spp. in animal

Monitoring system

Sampling strategy

Testing is carried out according to the sampling requirements of theRegulation of Cabinet of Ministers No 741, 6 November, 2007 Order of eradication of salmonella and other food-borne zoonotic agents in poultry flocks which are direct suppliers of small quantities to final consumer. 1.Samples are taken in poultry flocks others than Gallus gallus (quail etc.) for egg production: 1.1. day-old birds:- rinses from the internal surfaces of boxes in which the chicks are delivered to the holding;- samples from the carcasses of chicks found to be dead on arrival.1.2.pullets two weeks prior to entering the laying phase - pooled faecal samples;1.3.adult poultry - once during laying phase and 4 weeks prior to slaughter - pooled faecal samples.2. Samples are taken in duck and geese flocks for meat production - semi-annually one flock per holding prior to slaughter - pooled faecal samples.

Frequency of the sampling

Animals at farm

Case definition

Animals at farm

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

Diagnostic/analytical methods used

Animals at farm

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

Measures in case of the positive findings or single cases

-Official trade restrictions on poultry and products thereof are applied to the infected flock.-Live poultry from the infected flock is not allowed to leave the holding except for slaughter. -Meat of the positive flock has to be heat treated according to the Community legislation on food hygiene.-Table eggs are not allowed to leave the holding except for further processing in an establishment producing egg products.-The premises of the infected flock are cleaned and disinfected. Restocking is allowed after an official environmental sampling.-Epidemiological investigations are carried out to clarify the origin of the Salmonella infection.

Notification system in place

Salmonella spp. is notifiable in animals, foodstuffs, feed and humans.

3.1.3.2 Salmonella spp. in animal - Cattle (bovine animals)

Additional information

Salmonellosis in other animals than poultry is not surveyed. Table shows results of investigations on request of the owner or veterinarian in case of clinical symptoms.

3.1.3.3 Salmonella spp. in animal - Gallus gallus (fowl) - broilers

Monitoring system

Sampling strategy

Broiler flocks

Testing is carried out according to the sampling requirements of the:1)Regulation (EC)2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food-borne zoonotic agents;2)Commission Regulation (EU) No 200/2012 of 8 March 2012 concerning a Union target for the reduction of Salmonella enteritidis and Salmonella typhimurium in flocks of broilers, as provided for in Regulation (EC) No 2160/2003 of the European Parliament and of the Council;3)Regulation of Cabinet of Ministers No 741, 6 November, 2007 Order of eradication of salmonella and other food-borne zoonotic agents in poultry flocks which are direct suppliers of small quantities to final consumer. Every flock is sampled within three weeks prior to slaughter.

Frequency of the sampling

Broiler flocks: Before slaughter at farm

Every flock is sampled

Type of specimen taken

Broiler flocks: Before slaughter at farm

Socks/boot swabs

Case definition

Broiler flocks: Before slaughter at farm

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

Diagnostic/analytical methods used

Broiler flocks: Before slaughter at farm

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

Other preventive measures than vaccination in place

Broiler flocks

Bio-security measures are applied at the holdings.

Measures in case of the positive findings or single cases

Broiler flocks: At slaughter (flock based approach)

-Live animals from infected flock are not allowed to leave the holding except for slaughter.-The positive flock is slaughtered at the end of the working day or on a separate line. The slaughterhouse is thoroughly cleaned and disinfected afterwards.-The premises of the infected flock are cleaned and disinfected.

Notification system in place

All Salmonella serotypes are notifiable in animals, foodstuffs, feed and humans.

3.1.3.4 Salmonella spp. in animal - Pigs

Additional information

Salmonellosis in other animals than poultry is not surveyed. Table shows results of investigations on request of the owner or veterinarian in case of clinical symptoms.

3.1.3.5 Salmonella spp. in animal - Gallus gallus (fowl) - laying hens

Monitoring system

Sampling strategy

Laying hens flocks

Testing is carried out according to the sampling requirements of the:1)Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food-borne zoonotic agents;2)Commission Regulation (EU) No 517/2011 of 25 May 2011 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Union target for the reduction of the prevalence of certain Salmonella serotypes in laying hens of Gallus gallus and amending Regulation (EC) No 2160/2003 and Commission Regulation (EU) No 200/20103)Regulation of Cabinet of Ministers No 741, 6 November, 2007 Order of eradication of salmonella and other food-borne zoonotic agents in poultry flocks which are direct suppliers of small quantities to final consumer. 1.Samples of laying hen flocks are taken:1.1. for day-old chicks:-rinses from the internal surfaces of the container in which the chicks have been transported to the establishment;-materials from chicks that have died during transportation;1.2. pullets two weeks before the start of the laying cycle: pooled faecal samples.2. Samples from adult laying hens are taken every fifteen weeks.2.1.in cage flocks - two pooled faecal samples from each house where birds are kept;2.2.in barn or free range flocks - two pairs of boot swabs or socks from each house where birds are kept;3. The official samples mentioned in point 2 and dust sample are taken from adult laying hen flocks by FVS State veterinary inspector. If there is not sufficient dust, an additional sample of pooled faeces or an additional pair of boot swabs or socks shall be taken:3.1.in one flock per year per holding;3.2.at the age of 24+/-2 weeks in laying flocks housed in buildings where salmonella was detected in in the precending flock;3.3.in any case of suspicion of Salmonella Enteritidis or Salmonella Typhimurium infection, as aresult of the epidemiological investigation of food-borne outbreaks in accordance with Article 8 of Directive 2003/99/EC of the European Parliament and of the Council;3.4.in all other laying flocks on the holding in case Salmonella Enteritidis or Salmonella Typhimurium are detected in one laying flock on the holding;3.5.in cases where the Food and veterinary service considers it appropriate;3.6.a sampling carried out by State veterinary inspector may replace one sampling at the initiative of the operator.

Frequency of the sampling

Laying hens: Day-old chicks

Every flock is sampled

Laying hens: Rearing period

Pullets two weeks before the start of the laying cycle

Laying hens: Production period

Every 15 weeks

Laying hens: Before slaughter at farm

Type of specimen taken

Laying hens: Day-old chicks

Rinses from the internal surfaces of the container and dead chickens

Laying hens: Rearing period

Pooled faecal samples

Laying hens: Production period

Pooled faecal samples or boots/"socks"

Case definition

Laying hens: Day-old chicks

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

Laying hens: Rearing period

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

Laying hens: Production period

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

Laying hens: Before slaughter at farm

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

Diagnostic/analytical methods used

Laying hens: Day-old chicks

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

Laying hens: Rearing period

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

Laying hens: Production period

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

Vaccination policy

Laying hens flocks

Preventive vaccination against zoonotic salmonellosis agents is permitted using inactivated vaccines or live marked vaccines according to requirements of the Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards for the use of specific control methods in the framework of national programmes for the control of Salmonella in poultry.

Other preventive measures than vaccination in place

Laying hens flocks

Bio-security measures are applied at the holdings.

Measures in case of the positive findings or single cases

Laying hens flocks

-Trade restrictions on the animals and products thereof are applied to the infected flocks.-Live animals from the infected flock are not allowed to leave the holding except for slaughter.-Meat of the positive flock is heat treated according to the Community legislation on food hygiene.-Table eggs are not allowed to leave the holding except for further processing at an establishment producing egg products.-The premises of the infected flock are cleaned and disinfected. Restocking is allowed after an official environmental sampling.- If Salmonella spp. are detected in a laying hen flock, all other flocks in the same holding are officialy sampled at the earliest convenience.-Epidemiological investigations are carried out to clarify the origin of the Salmonella infection.

Notification system in place

All Salmonella serotypes are notifiable in animals, foodstuffs, feed and humans.

3.1.3.6 Salmonella spp. in animal - Gallus gallus (fowl) - breeding flocks, unspecified

Monitoring system

Sampling strategy

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

Testing is carried out according to the sampling requirements of the:1)Regulation (EC) 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food-borne zoonotic agents;2)Commission Regulation (EU) No 200/2010 of 10 March 2010 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Union target for the reduction of the prevalence of Salmonella serotypes in adult breeding flocks of Gallus gallus1. Samples in parent breeding flocks of Gallus gallus are taken:1.1. for day-old chicks:-rinses from the internal surfaces of the container in which the chicks have been transported to the establishment;-materials from chicks that have died during transportation;1.2. four-week old birds: pooled faecal samples;1.3. birds two weeks before starting of the laying cycle: pooled faecal samples.2. Samples in adult breeding flocks of Gallus gallus are taken every third week:2.1. in free-access flocks:-two pooled faecal samples from each building where birds are kept;or-five pairs of boots/"socks".2.2. in cage breeding flocks, depending on how faeces are collected:-two pooled faecal samples from dropping belts;or-twp pooled faecal samples from scrapers;or-two pooled faecal samples from deep pits.2.3. These samples are also taken from breeding flocks of Gallus gallus with less than 250 birds.2.4. The official samples mentioned in 2. are taken two times from adult breeding flocks of Gallus gallus by a FVS State veterinary inspector:2.4.1. within four weeks following the start of laying cycle;2.4.2. eight weeks before the end of the laying cycle;2.4.3. at any time during the laying cycle, but not close to the samples mentioned in 2.4.1. and 2.4.2.3. Sampling at the hatchery:3.1. one composite sample of visibly soiled hatcher basket liners taken at random from five separate hatcher baskets or locations in the hatcher to reach a total sampling surface of at least 1 m2; if the hatching eggs from a breeding flock occupy more than one hatcher, then such a composite sample shall taken from each hatcher up to a maximum of five; or 3.2. one sample taken with one or several moistened fabric swab(s) of at least 900 cm2 surface area in total, taken immediately after the removal of the chickens from the whole surface area of the bottom of at least a total of five hatcher baskets, or from fluff from five places, including on the floor, in each hatcher up to a maximum of five with hatched eggs from the flock, ensuring that at least one sample per flock from which eggs are derived, is taken; or3.3. 10g of broken eggshells taken from a total of 25 separate hatcher baskets, namely 250g in the initial sample, in up to five hatchers with hatched eggs from the flock, crushed, mixed and sub-sampled to from a 25g subsample for testing.3.4. every 16 weeks, the sampling provided in 3.1. or 3.2. or 3.3 must be replaced by official sampling.

Frequency of the sampling

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

Every flock is sampled

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

Other: four-week old birds and young birds two weeks before the start of the laying cycle

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

Every third week

Type of specimen taken

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

Rinses from the internal surfaces of the container and dead chickens

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

Pooled faecal samples or boots/"socks"

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

Boots/"socks"

Case definition

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

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

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

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

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

A positive case is a unit (flock, herd or individual animal) confirmed positive for Salmonella. In general, the flock is the epidemiological unit.

Diagnostic/analytical methods used

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

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

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

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

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

Bacteriological method: Amendment 1 of EN/ISO 6579-2002/Amd1:2007

Vaccination policy

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

Preventive vaccination against zoonotic salmonellosis agents is permitted using inactivated vaccines or live marked vaccines.

Other preventive measures than vaccination in place

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

-Bio-security measures are applied at the holdings.-Antibiotics are not used as a specific method to control Salmonella except under clearly defined exceptional circumstances as laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 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 national programmes for the control of Salmonella in poultry.

Measures in case of the positive findings or single cases

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

-Official trade restrictions on the animals and the products thereof are applied to the infected flock.-Live animals from the infected flock are not allowed to leave the holding except for slaughter.-The positive flock is slaughtered at the end of the working day or on a separate line. The slaughterhouse is thoroughly cleaned and disinfected afterwards.- Meat of the positive flock is heat treated according to the Community legislation on food hygiene.-Hatching eggs are not allowed to leave the holding except for destruction or further processing at an establishment producing egg products.-The premises of the infected flock are cleaned and disinfected. Restocking is allowed after an official enviromental sampling.-If Salmonella spp. are detected in a breeding flock, all other flocks in the same holding are officially sampled at the earliest convenience.-Official epidemiological investigations are carried out to clarify the origin of the Salmonella infection.

3.1.3.7 Salmonella spp. in Ducks - breeding flocks and meat production flocks

Additional information

Look at Salmonella spp. in animal

3.1.3.8 Salmonella spp. in Geese - breeding flocks and meat production flocks

Additional information

Look at Salmonella spp. in animal

3.1.3.9 Salmonella spp. in Turkeys - breeding flocks and meat production flocks

Additional information

There are no registered commercial turkey holdings in Latvia.

3.2 CAMPYLOBACTERIOSIS

3.2.1 General evaluation of the national situation

3.2.1.1 Thermophilic Campylobacter spp., unspecified - general evaluation

History of the disease and/or infection in the country

Campylobacter in food has been monitored for the first time in 2004. In 2004 and 2005, there was no control programme in place for thermophilic Campylobacter in feed or animals. Campylobacter in broiler flocks has been monitored for the first time in 2006 and following in 2007. In 2008 monitoring of Campylobacter in broiler flocks was carried out in the framework of the Baseline Survey on Campylobacter spp. in broiler flocks and Campylobacter spp. and Salmonella spp. in broiler carcasses (Commission Decision 2007/516/EC of 19 July 2007).From 2009 to 2013 there was no control programme in place for the thermophilic Campylobacter in food and animals.Campylobacteriosis is a notifiable disease in humans and animals.

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

Because of the short time that Campylobacter is controlled in food and monitored in broiler flocks, it is not possible to evaluate trends. The number of human cases is very low and presumably does not reflect the real situation.

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 retail

Frequency of the sampling

Type of specimen taken

Definition of positive finding

Diagnostic/analytical methods used

Control program/mechanisms

The control program/strategies in place

Measures in case of the positive findings or single cases

3.3 LISTERIOSIS

3.3.1 General evaluation of the national situation

3.3.1.1 Listeria - general evaluation

History of the disease and/or infection in the country

Monitoring of Listeria monocytogenes in food has been started in 2003 in the frame of a national surveillance programme. It was the first targeted control programme that has been set up additionally to the laboratory control programme, because Listeria is considered to be one of the most important microorgansims to cause human disease that may have fatal outcome. Especially the risk groups like pregnant women, newborns and small children and older people are very sensitive to Listeria infections, and there have been fatal cases in humans in the past. In 2009, the national control programme on Listeria monocytogenes was based on the Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of Salmonella and other specified foodborne zoonotic agents. In 2010, no control programme on Listeria monocytogenes for food in palce. In the year 2011 L. monocytogenes were controled in the framework of EU Coordinated programme.

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

Due to a short time of controlling foodstuffs and risk products it is hardly possible to evaluate trends.

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

Human cases are occuring sporadically.

Additional information

3.4 E. COLI INFECTIONS

3.4.1 General evaluation of the national situation

3.4.1.1 Verotoxigenic E. coli (VTEC) - general evaluation

History of the disease and/or infection in the country

In 2014, no control programme was existing in Latvia regarding VTEC infections in animals.Samples are sent by private veterinarians.

Additional information

The method used for detection of VTEC in animals is classical bacteriological method according to OIE Manual 2014 Chapter 2.9.11. Serogroups of E.coli are detected with antisera. It is possible to detect 20 different serogroups.

3.5 YERSINIOSIS

3.5.1 General evaluation of the national situation

3.5.1.1 Yersinia - general evaluation

History of the disease and/or infection in the country

There is no program in place to control or monitor Yersinia enterocolitica in animals or food.

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 2004, the Food and Veterinary Service has elaborated methodological guidelines for the veterinary expertise of pigs, cows, sheep, goats, horses and farmed and wild game at slaughterhouses determining the order and methods for detection and identification of trichinellosis agents. Guidelines are based on the requirements of Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption and Commission Regulation (EC) No 2075/2005 of 5 December 2005 laying down specific rules on official controls for Trichinella in meat. All the carcasses of pigs, horses, wild and farmed game are sampled and tested for Trichinella at slaughter. In cases when animals are slaughtered at home or hunted for personal consumption, it is the duty of the owner of the animals or the hunter, respectively, to ensure that meat samples are sent for laboratory testing.

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

Surveillance in productive animals is achieved trough the official meat inspection, where macroscopic investigation on hydatid cysts at the abattoir is part of the meat inspection procedure. Inspection is conducted according to the methodological guidelines of the Food and Veterinary Service for veterinary expertise of pigs, cows, sheep, goats, horses and farmed and wild game at slaughterhouses. These guidelines are based on requirements of Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption. There are no official monitoring programmes for echinococcosis in the final hosts - dogs and cats. Treatment with anti-helmintic drugs is advised.

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

After the First World War intensive spreading of rabies occured in 1923 - when were detected 308 cases of rabies in domestic animals from which 217 cases of rabies were detected in dogs. 260 dogs become ill with rabies in 1927. Till 1950 was observed rabies called - urban rabies - because rabies cases mostly detected in dogs. Since then "urban rabies" cases decreased and increased rabies cases in wild animals. The density of red foxes and racoon dogs in Latvia has been increasing from 1,16 per square kilometre in 1998 up to 1,7 per square kilometre in 2003. The main reservoir for rabies in Latvia are red foxes and racoon dogs. The rabies cases in red foxes varied between 71 and 144 in the years from 1993 until 1999, in racoon dogs there were between 20 and 39 cases of rabies. Since the year 2000, these numbers increased and had a peak in 2003 (471 cases in red foxes, 285 cases in racoon dogs). From the year 2004 until 2006, rabies cases in red foxes varied between 165 and 187, in racoon dogs there were between 126 and 153 cases of rabies. As a result of oral vaccination of wild animals (foxes and racoon dogs) rabies cases decreased about two times in 2007 - 95 rabies cases in red foxes and 33 rabies cases in racoon dogs were diagnosed. Also in 2008 and 2009 the number of cases continued to decrease - 44 cases and 24 rabies cases respectively in red foxes and 41 cases and 24 rabies cases accordingly in racoon dogs were detected. In 2010 there were only 16 cases of rabies from which 11 rabies cases were detected in red foxes and 1 rabies cases was detected in racoon dog. One rabies case reported in 2011 - in horse, but in 2012 registered two rabies cases - one in cattle and one in dog. From 2012 no rabies cases detected.Other animals infected with rabies in the last years were for example minks, roes, martens, badgers, polecats, dogs, cats and cattle.

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

Infection generally occurs through a bite from infected animals. Wild animals (foxes and racoon dogs) are the most common source of infection in Latvia.

Additional information

In Latvia, in certain territories the oral vaccination of red foxes against rabies has been started in 1991. First used oral vaccine against rabies was vaccine was not originally introduced in baits and produced in Russia. This vaccine veterinarians introduced in baits (for instance - in jawl) by themselves. The oral vaccination of foxes and racoon dogs against rabies by vaccine originally introduced in baits has been started in 1998. Vaccination campaigns have been carried out twice per year: during spring and autumn. From 1998 - 2004, vaccine baits were distributed by hands (manual distribution), but since 2005, aerial distribution is used.

3.8.2 Lyssavirus (rabies) in animals

3.8.2.1 Lyssavirus (rabies) in animal - Dogs

Additional information

According to requirement of the "Veterinary Medicine Law" of 26 April 2001 -all dogs must be vaccinated against rabies in accordance with leaflet provided by drug producer.

3.8.2.2 Rabies virus (RABV) in animal

Monitoring system

Sampling strategy

In 2014, there were active and passive surveillance programmes in place regarding rabies. In case of suspicion of rabies in a wild animal, pet or productive animal, the owner or finder, respectively, has to report immediately to an authorized veterinarian or the FVS. In dead animals, a partial post mortem inspection is performed and brain material is taken for further investigations. For pets or productive animals under suspicion - see measures. Sampling is also performed in red foxes and racoon dogs to control the uptake of vaccine baits and to determine the antibody titer. These foxes and racoon dogs are hunted and submitted to the BIOR.

Frequency of the sampling

Foxes and racoon dogs - during hunting seasonAnimals found dead, suspicions - throughout the year

Methods of sampling (description of sampling techniques)

Case definition

A case that is laboratory confirmed.

Diagnostic/analytical methods used

Detection of viral antigens by an immunofluorescence test in neurological tissue (brain) in connection to partial post-mortem examination. If the immunofluorescence test in neurological tissue (brain) is negative, isolation and identification of virus in cell culture. Genotyping of the virus by PCR is used for further investigations. Exceptionally, the mouse inoculation test is performed.

Vaccination policy

According to requirement of the "Veterinary Medicine Law" of 26 April 2001 -all cats, dogs and ferrets must be vaccinated against rabies in accordance with leaflet provided by drug producer.Foxes and racoon dogs - see general evaluation

Control program/mechanisms

The control program/strategies in place

Vaccination of red foxes and racoon dogs by aerial distribution of vaccine baits twice a year near the border of Latvia and Russian Federation and Belarus will be continued in order to control rabies.

Measures in case of the positive findings or single cases

Suspected animals will be put under observation for 10 days (cats, dogs and ferrets) or 15 days (other domestic animals). If the animal is vaccinated and no symptoms occur, the animal is re-vaccinated. In case the animal is not vaccinated, it has to be euthanised. Brain tissue is submitted to the BIOR for further investigations.If the animal has not been vaccinated and the owner refuses to euthanise it, observation of animal for more longer period and vaccination is performed.

Notification system in place

Regulation of Cabinet of Ministers Nr. 178, 23 February 2010 "Order of the prophylaxis and eradication of rabies" determines responsibilities of animal owners/keepers, an authorised veterinarians and state institutions, and determines how to carry out prophylaxis and eradication of rabies.In case of suspicion of rabies in a wild animals, pets or productive animals, the owner/keeper or finder, respectively, has to report immediately to an authorized veterinarian or the Food and Veterinary Service. If an infection of animals with a rabies has been confirmed, a regional office of the Food and Veterinary Service provide information to branch of The Centre for Disease Prevention and Control, the district of State Forest Service and municipality regarding the location of the zoonosis outbreak and measures taken to contain the disease. Municipality then informs inhabitants on rabies case and measures taken.

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

In accordance with the epidemiological surveillance data, since 1974 rabies cases in humans have been registered as follows:- 1982: 1 case in Kraslava district, source of infection: dog;- 1986: 1 case in Kraslava district, source of infection: fox;- 1993: 1 case in Saldus district, source of infection: fox;- 2003: 1 case in Daugavpils district, source of infection: dog.

3.9 Q-FEVER

3.9.1 General evaluation of the national situation

3.9.1.1 Coxiella (Q-fever) - general evaluation

History of the disease and/or infection in the country

In 2014, no control programme was existing in Latvia regarding Coxiella brunetii (Q fever) infections in animals.Samples are sent by private veterinarians.

3.10 TOXOPLASMA

3.10.1 General evaluation of the national situation

3.10.1.1 Toxoplasma - general evaluation

History of the disease and/or infection in the country

In 2014, Latvia had no monitoring programme in place to control Toxoplasma spp. in animals. Samples are sent by private veterinarians.

4 ANTIMICROBIAL RESISTANCE INFORMATION ON SPECIFIC ZOONOSES AND ZOONOTIC AGENTS

4.1 SALMONELLOSIS

4.1.1 Salmonella in animals

4.1.1.1 Antimicrobial resistance in Salmonella Poultry, unspecified

Additional information

Differences between prevalence tables and antimicrobial resistance tables are due to fact, that for instance positive poultry flock is counted only once irrespective of number of samples taken and isolated salmonella cultures from flock. Also antimicrobial resistance is detected for salmonella cultures from official samples and self - control samples, which are investigated in Nacional reference laboratory BIOR, there no shown data on antimicrobial resistance from self-control samples investigated in private (company) laboratories. In the prevalence tables shown all data from official control and self-control as well.

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

Laboratory used for detection for resistance

Cut-off values used in testing

4.2.2 Campylobacter in animals

4.2.2.1 Antimicrobial resistance in Campylobacter jejuni and coli in Poultry, unspecified

Description of sampling designs

Sampling and surveillance of antimicrobial resistance of Campylobacter jejuni is carried out according to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Sampling strategy used in monitoring

Frequency of the sampling

One representative pooled caecal sample per one broiler flock. Sampling was carried out in the slaughterhouses.

Laboratory methodology used for identification of the microbial isolates

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Type of specimen taken

Pooled caecal sample (10 caecas) per one broiler flock.

Methods of sampling (description of sampling techniques)

Each caecum was taken from bird during intestinal removing. From each bird's intestinal tract was taken one intact caecum with content, caecum was cut with 5-6 cm of the small intestine. In the case if caecum was without content, it was not taken as a sample, but was choose another caecum with intestinal contents.The birds from which takes caecum, it was recommended to select at random from all flock (instead of the first part of the flock), as well as samples were not taken from birds in a row.Ten caeca were placed in a sterile container - a plastic container with a lid (container volume ~ 200 ml) or sterile bag, to create one pooled sample.

Stratification procedures per animal populations and food categories

Sampling done in the broiler flocks at slaughterhouse level.

Procedures for the selection of isolates for antimicrobial testing

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Cut-off values used in testing

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

4.3 ESCHERICHIA COLI, NON-PATHOGENIC

4.3.1 Escherichia coli, non-pathogenic in animals

4.3.1.1 Antimicrobial resistance in E.coli, non-pathogenic, unspecified

Description of sampling designs

Sampling and surveillance of antimicrobial resistance of Campylobacter jejuni is carried out according to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Sampling strategy used in monitoring

Frequency of the sampling

One representative pooled caecal sample per one broiler flock. Sampling was carried out in the slaughterhouses.

Type of specimen taken

Pooled caecal sample (10 caecas) per one broiler flock.

Stratification procedures per animal populations and food categories

Sampling done in the broiler flocks at slaughterhouse level.

Methods of sampling (description of sampling techniques)

Each caecum was taken from bird during intestinal removing. From each bird's intestinal tract was taken one intact caecum with content, caecum was cut with 5-6 cm of the small intestine. In the case if caecum was without content, it was not taken as a sample, but was choose another caecum with intestinal contents.The birds from which takes caecum, it was recommended to select at random from all flock (instead of the first part of the flock), as well as samples were not taken from birds in a row.Ten caeca were placed in a sterile container - a plastic container with a lid (container volume ~ 200 ml) or sterile bag, to create one pooled sample.

Procedures for the selection of isolates for antimicrobial testing

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Laboratory methodology used for identification of the microbial isolates

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Laboratory used for detection for resistance

Antimicrobials included in monitoring

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

Cut-off values used in testing

According to requirements of Commission implementing decision No 2013/652/EU of 12 November 2013 on the monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria.

5 FOODBORNE OUTBREAKS

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

5.1 Outbreaks

5.1.1 Foodborne outbreaks

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

Clinicians are legally responsible for notifying of infectious diseases, including food-borne diseases. Notification is required for cases of suspected infectious disease, a change or discharge of diagnosis of an infectious disease, the final diagnosis and outcome of infectious disease and laboratory confirmation of the diagnosis. Epidemiologists of the Centre for Disease Prevention and Control of Latvia (CDPC) receive information from clinicians and perform investigation of the cases (outbreaks), take environmental samples for laboratory investigation, collect, store and analyse the epidemiological data, organize preventive and control measures.

Description of the types of outbreaks covered by the reporting:

In 2014, there were 513 food-borne outbreaks (food-borne, or via household contact) with 2 and more cases, including 26 outbreaks with 5 or more cases. Household contact was the main cause for outbreaks of viral aetiology.

National evaluation of the reported outbreaks in the country:

Trends in numbers of outbreaks and numbers of human cases involved

Altogether 1397 cases were registered, including 3 strong evidence outbreaks (Salmonella Enteritidis - 2, Staphylococcal enterotoxins - 1) with 22 cases, related to bakery products with creme and eggs.

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

Among all outbreaks 3.9% were caused by Salmonella spp., 16,6% - by Norwalk virus, 54,6% - by Rotavirus and mixed viruses, 0.4% were caused by Campylobacter jejuni, 0.2% - caused by Yersinia enterocolotoca, 18.5% were related to causative agents of unknown aethyology, and the rest related to other pathogens. Like previous years salmonelosis was caused mainly by improperly prepared egg/poultry products.

Evaluation of the severity and clinical picture of the human cases

We do not collect clinical information for all cases.

Descriptions of single outbreaks of special interest

The strong evidence outbreak caused by staphylococcus with 15 cases was related to sports event where cake with salmonella contaminated creme was served by local cafeteria. S.aureus was found on the vessel and hands of 3 cafeteria employees. The first strong evidence S.Enteritidis outbreak was related to homemade Tiramisu cake with raw eggs consumed during picnic, and the second one - to household food contamination with raw eggs.

Control measures or other actions taken to improve the situation

Outbreak investigation includes recommendations from the Public health specialists, as well control and penalty measures (if necessary - closure) by other control institutions, Food veteriary Service and Health Inspection, working together with the Centre for Disease Prevention and Control of Latvia

ANIMAL POPULATION TABLES

Table Susceptible animal population

		Population			
Animal species	**Category of animals**	**holding**	**animal**	**slaughter animal (heads)**	**herd/flock**
Cattle (bovine animals)	Cattle (bovine animals) (not specified)	28,059	422,019	90,990	28,059
Deer	Deer - farmed (not specified)	137	11,617		137
Ducks	Ducks (not specified)	3	499		3
Gallus gallus (fowl)	Gallus gallus (fowl) - broilers (not specified)	3	1,700,000	17,169,497	70
	Gallus gallus (fowl) - laying hens (not specified)	83	2,963,947		108
	Gallus gallus (fowl) - parent breeding flocks for broiler production line (not specified)	1	199,640		26
	Gallus gallus (fowl) (not specified)	86	4,863,587	17,169,497	204
Geese	Geese (not specified)	2	549		2
Goats	Goats (not specified)	2,708	12,287	155	2,708
Ostriches	Ostriches - farmed	4	85		4
Pigs	Pigs (not specified)	2,878	328,857	420,776	2,878
Quails	Quails - laying hens	26	6,892		26
Sheep	Sheep (not specified)	4,162	92,544	15,017	4,162
Solipeds, domestic	Solipeds, domestic - horses	4,237	10,068	289	4,237

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	Number of animals positive in microbiological testing under investigations of suspect cases	Number of animals tested by micriobiology under investigations of suspect cases	Number of seropositive animals under investigations of suspect cases	Number of suspended herds under investigations of suspect cases	Number of animals serologically tested under investigations of suspect cases	Number of infected herds tested under surveillance	Number of animals tested under surveillance	Number of herds tested under surveillance	Total number of animals
Latvija (**)	6,870	0	6,870	0	0	0	0	0	0	5,837	665	104,831

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 microbiological testing under investigations of suspect cases	Number of animals tested by micriobiology under investigations of suspect cases	Number of animals positive to BST under investigations of suspect cases	Number of seropositive animals under investigations of suspect cases	Number of suspended herds under investigations of suspect cases	Number of animals serologically tested under investigations of suspect cases	Number of abortions due to Brucella abortus	Number of isolations of Brucella infections	Number of notified abortions whatever cause	Number of infected herds tested under surveillance by bulk milk	Number of animals or pools tested under surveillance by bulk milk	Number of herds tested under surveillance by bulk milk	Number of infected herds tested under surveillance	Number of animals tested under surveillance	Number of herds tested under surveillance	Total number of animals
Latvija (**)	28,059	0	28,059	0	0	0	0	0	0	0	0	1,303	0	28,006	1,041	0	37,078	8,044	422,019

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 the introduction into the herds	Number of animals tested with tuberculin routine testing	Interval between routine tuberculin tests	Total number of animals
Latvija (**)	28,059	0	28,059	0	0	0	0	0	422,019

PREVALENCE TABLES

Table BRUCELLA in animal

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
Dogs - pet animals - - Latvia - animal sample - blood - Clinical investigations - Not applicable - Suspect sampling	animal	2	0	Brucella - B. abortus	0
				Brucella - B. melitensis	0
				Brucella - B. suis	0
				Brucella - Brucella spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - blood - Control and eradication programmes - Industry sampling - Objective sampling	animal	13964	0	Brucella - B. abortus	0
				Brucella - B. melitensis	0
				Brucella - B. suis	0
				Brucella - Brucella spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Control and eradication programmes - Official and industry sampling - Objective sampling	animal	9	0	Brucella - B. abortus	0
				Brucella - B. melitensis	0
				Brucella - B. suis	0
				Brucella - Brucella spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - organ/tissue - Control and eradication programmes - Official sampling - Objective sampling	animal	1	0	Brucella - B. abortus	0
				Brucella - B. melitensis	0
				Brucella - B. suis	0
				Brucella - Brucella spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample (not specified) - Control and eradication programmes - Official sampling - Objective sampling	animal	2	0	Brucella - B. abortus	0
				Brucella - B. melitensis	0
				Brucella - B. suis	0
				Brucella - Brucella spp., unspecified	0

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
Cats - pet animals - - Latvia - animal sample - faeces - Clinical investigations - Not applicable - Suspect sampling	animal	4	0	Campylobacter - C. coli	0
				Campylobacter - C. jejuni	0
				Campylobacter - C. lari	0
				Campylobacter - C. upsaliensis	0
				Campylobacter - Thermophilic Campylobacter spp., unspecified	0
Cattle (bovine animals) - adult cattle over 2 years - Farm (not specified) - Latvia - animal sample - faeces - Clinical investigations - Official and industry sampling - Suspect sampling	animal	7	0	Campylobacter - C. coli	0
				Campylobacter - C. jejuni	0
				Campylobacter - C. lari	0
				Campylobacter - C. upsaliensis	0
				Campylobacter - Thermophilic Campylobacter spp., unspecified	0
Cattle (bovine animals) - calves (under 1 year) - Farm (not specified) - Latvia - animal sample - faeces - Clinical investigations - Official and industry sampling - Suspect sampling	animal	8	1	Campylobacter - C. coli	0
				Campylobacter - C. jejuni	1
				Campylobacter - C. lari	0
				Campylobacter - C. upsaliensis	0
				Campylobacter - Thermophilic Campylobacter spp., unspecified	0
Dogs - pet animals - - Latvia - animal sample - faeces - Clinical investigations - Not applicable - Suspect sampling	animal	28	2	Campylobacter - C. coli	0
				Campylobacter - C. jejuni	2
				Campylobacter - C. lari	0
				Campylobacter - C. upsaliensis	0
				Campylobacter - Thermophilic Campylobacter spp., unspecified	0
Gallus gallus (fowl) - broilers - Slaughterhouse - Latvia - animal sample - caecum - Monitoring - active - Official sampling - Objective sampling	herd/flock	147	93	Campylobacter - C. coli	0
				Campylobacter - C. jejuni	93
				Campylobacter - C. lari	0
				Campylobacter - C. upsaliensis	0
				Campylobacter - Thermophilic Campylobacter spp., unspecified	0

Table COXIELLA (Q-FEVER) in animal

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
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - blood - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	604	70		Coxiella (Q-fever) - C. burnetii	70
Goats - Farm (not specified) - Latvia - animal sample - blood - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	6	0		Coxiella (Q-fever) - C. burnetii	0
Sheep - Farm (not specified) - Latvia - animal sample - blood - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	27	0		Coxiella (Q-fever) - C. burnetii	0

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
Cattle (bovine animals) - Slaughterhouse - Latvia - - Surveillance - Official sampling - Census	animal	90990	0	Echinococcus - E. granulosus	0
				Echinococcus - E. multilocularis	0
				Echinococcus - Echinococcus spp., unspecified	0
Goats - Slaughterhouse - Latvia - - Surveillance - Official sampling - Census	animal	155	0	Echinococcus - E. granulosus	0
				Echinococcus - E. multilocularis	0
				Echinococcus - Echinococcus spp., unspecified	0
Pigs - Slaughterhouse - Latvia - - Surveillance - Official sampling - Census	animal	420776	0	Echinococcus - E. granulosus	0
				Echinococcus - E. multilocularis	0
				Echinococcus - Echinococcus spp., unspecified	0
Sheep - Slaughterhouse - Latvia - - Surveillance - Official sampling - Census	animal	15017	0	Echinococcus - E. granulosus	0
				Echinococcus - E. multilocularis	0
				Echinococcus - Echinococcus spp., unspecified	0
Solipeds, domestic - horses - Slaughterhouse - Latvia - - Surveillance - Official sampling - Census	animal	289	0	Echinococcus - E. granulosus	0
				Echinococcus - E. multilocularis	0
				Echinococcus - Echinococcus spp., unspecified	0

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
Meat from pig - meat products - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	15	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, mixed meat - meat products - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	95	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 - ready-to-eat - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	40	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

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
Fish - unspecified - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single		NOT AVAILABLE	18		>200 to <= 400	Histamine	18	0
						>100 to <= 200	Histamine	18	0
						> 400	Histamine	18	0
						<= 100	Histamine	18	18
Fish - unspecified - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single		NOT AVAILABLE	36		>200 to <= 400	Histamine	36	0
						>100 to <= 200	Histamine	36	0
						> 400	Histamine	36	0
						<= 100	Histamine	36	36
Fishery products, unspecified - cooked - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single		NOT AVAILABLE	27		>200 to <= 400	Histamine	27	0
						>100 to <= 200	Histamine	27	0
						> 400	Histamine	27	0
						<= 100	Histamine	27	27

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
Cattle (bovine animals) - calves (under 1 year) - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official and industry sampling - Suspect sampling	animal	8	0	Listeria - L. monocytogenes	0
				Listeria - Listeria spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal	193	43	Listeria - L. monocytogenes	43
				Listeria - Listeria spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official sampling - Suspect sampling	animal	1	1	Listeria - L. monocytogenes	1
				Listeria - Listeria spp., unspecified	0
Goats - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal	3	0	Listeria - L. monocytogenes	0
				Listeria - Listeria spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal	9	0	Listeria - L. monocytogenes	0
				Listeria - Listeria spp., unspecified	0
Sheep - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal	10	2	Listeria - L. monocytogenes	2
				Listeria - Listeria spp., unspecified	0
Sheep - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official and industry sampling - Suspect sampling	animal	9	2	Listeria - L. monocytogenes	2
				Listeria - Listeria spp., unspecified	0

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
Cheeses made from cows' milk - curd - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	45		>100	Listeria - L. monocytogenes	45	0
						<= 100	Listeria - L. monocytogenes	45	0
Cheeses made from cows' milk - curd - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	45		detection	Listeria - L. monocytogenes	0	0
Cheeses made from cows' milk - soft and semi-soft - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	35		>100	Listeria - L. monocytogenes	35	0
						<= 100	Listeria - L. monocytogenes	35	0
Cheeses made from cows' milk - soft and semi-soft - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	35		detection	Listeria - L. monocytogenes	0	0
Dairy products (excluding cheeses) - butter - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	5		>100	Listeria - L. monocytogenes	5	0
						<= 100	Listeria - L. monocytogenes	5	0
Dairy products (excluding cheeses) - butter - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	5		detection	Listeria - L. monocytogenes	0	0
Dairy products (excluding cheeses) - cream - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	15		>100	Listeria - L. monocytogenes	15	0
						<= 100	Listeria - L. monocytogenes	15	0
Dairy products (excluding cheeses) - cream - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	15		detection	Listeria - L. monocytogenes	0	0
Fish - marinated - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	10		>100	Listeria - L. monocytogenes	10	0
						<= 100	Listeria - L. monocytogenes	10	0
Fish - marinated - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	10		detection	Listeria - L. monocytogenes	0	0
Fish - smoked - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	115		>100	Listeria - L. monocytogenes	115	0
						<= 100	Listeria - L. monocytogenes	115	0
Fish - smoked - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	115		detection	Listeria - L. monocytogenes	0	0
Meat from pig - meat products - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	40		>100	Listeria - L. monocytogenes	40	0
						<= 100	Listeria - L. monocytogenes	40	0
Meat from pig - meat products - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	40		detection	Listeria - L. monocytogenes	0	0
Meat, mixed meat - meat products - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	10		>100	Listeria - L. monocytogenes	10	0
						<= 100	Listeria - L. monocytogenes	10	0
Meat, mixed meat - meat products - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	10		detection	Listeria - L. monocytogenes	0	0
Meat, mixed meat - meat products - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	85		>100	Listeria - L. monocytogenes	85	0
						<= 100	Listeria - L. monocytogenes	85	0
Meat, mixed meat - meat products - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	1	Gram	85		detection	Listeria - L. monocytogenes	0	0

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
Badgers - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	6	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Beavers - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	2	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Cats - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	38	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Cattle (bovine animals) - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	9	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Deer - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Deer - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	3	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Dogs - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	19	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0

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
Foxes - wild - - Latvia - animal sample - brain - Monitoring - Official sampling - Suspect sampling	animal	68	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Goats - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Hedgehogs - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Jackals - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Lynx - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Marten - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	9	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Minks - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	4	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Polecats - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0

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
Polecats - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - Rabies virus (RABV)	0
Raccoon dogs - wild - - Latvia - animal sample - brain - Monitoring - Official sampling - Suspect sampling	animal	72	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Rats - wild - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	3	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Sheep - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	1	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0
Wild animals - - Latvia - animal sample - brain - NOT AVAILABLE - Official sampling - Suspect sampling	animal	2	0	Lyssavirus (rabies) - EBLV-1	0
				Lyssavirus (rabies) - EBLV-2	0
				Lyssavirus (rabies) - Lyssavirus (unspecified virus)	0
				Lyssavirus (rabies) - Rabies virus (RABV)	0

Table MYCOBACTERIUM in animal

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
Gallus gallus (fowl) - Farm (not specified) - Latvia - - Surveillance - Industry sampling - Objective sampling	animal	364	0	Mycobacterium - M. bovis	0
				Mycobacterium - M. tuberculosis	0
				Mycobacterium - Mycobacterium spp., unspecified	0
Pigs - Farm (not specified) - Latvia - - Surveillance - Industry sampling - Objective sampling	animal	2635	0	Mycobacterium - M. bovis	0
				Mycobacterium - M. tuberculosis	0
				Mycobacterium - Mycobacterium spp., unspecified	0

Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Cattle (bovine animals) - calves (under 1 year) - Farm (not specified) - Latvia - animal sample - faeces - Clinical investigations - Official and industry sampling - Suspect sampling	animal		NA	8	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Cattle (bovine animals) - calves (under 1 year) - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official and industry sampling - Suspect sampling	animal		NA	21	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - faeces - Clinical investigations - Industry sampling - Suspect sampling	animal		NA	10	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal		NA	188	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official and industry sampling - Suspect sampling	animal		NA	26	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample (not specified) - Clinical investigations - Industry sampling - Suspect sampling	animal		NA	2	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Ducks - Farm (not specified) - Latvia - animal sample - faeces - Control and eradication programmes - Official and industry sampling - Census	herd/flock	3	NA	3	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Indiana	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Fur animals - farmed - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Industry sampling - Suspect sampling	animal		NA	22	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0

Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Fur animals - farmed - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Industry sampling - Suspect sampling	animal		NA	22	0	Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - broilers - Farm (not specified) - Latvia - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	594	Y	594	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Indiana	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - laying hens - - European Union - animal sample - organ/tissue - Control and eradication programmes - Industry sampling - Census	herd/flock	22	Y	22	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Indiana	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - laying hens - - Latvia - animal sample - faeces - Control and eradication programmes - Industry sampling - Census	herd/flock	22	Y	22	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Indiana	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - laying hens - Farm (not specified) - Latvia - animal sample - faeces - Control and eradication programmes - Official and industry sampling - Census	herd/flock	72	NA	72	4	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	1
						Salmonella - S. Enteritidis	1
						Salmonella - S. Indiana	1
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	1
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - laying hens - Farm (not specified) - Latvia - animal sample - faeces - Surveillance - Industry sampling - NOT AVAILABLE	herd/flock		NA	2	2	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	0
						Salmonella - S. Enteritidis	1
						Salmonella - S. Indiana	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	1
						Salmonella - Salmonella spp., unspecified	0

Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Gallus gallus (fowl) - laying hens - Farm (not specified) - Latvia - environmental sample - boot swabs and dust - Control and eradication programmes - Official and industry sampling - Census	herd/flock	36	Y	36	5	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	0
						Salmonella - S. Enteritidis	1
						Salmonella - S. Indiana	0
						Salmonella - S. Infantis	4
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - parent breeding flocks for broiler production line - - European Union - animal sample - organ/tissue - Control and eradication programmes - Industry sampling - Census	herd/flock	20	Y	20	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Hadar	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - S. Virchow	0
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - parent breeding flocks for broiler production line - - Latvia - environmental sample - boot swabs - Control and eradication programmes - Industry sampling - Census	herd/flock	22	Y	22	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Hadar	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - S. Virchow	0
						Salmonella - Salmonella spp., unspecified	0
Gallus gallus (fowl) - parent breeding flocks for broiler production line - - Latvia - environmental sample - boot swabs - Control and eradication programmes - Official and industry sampling - Census	herd/flock	26	Y	26	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Hadar	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - S. Virchow	0
						Salmonella - Salmonella spp., unspecified	0
Geese - Farm (not specified) - Latvia - animal sample - faeces - Control and eradication programmes - Official and industry sampling - Census	herd/flock	2	NA	2	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Chartres	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Indiana	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Goats - Farm (not specified) - Latvia - animal sample - faeces - Clinical investigations - Industry sampling - Suspect sampling	animal		NA	1	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0

Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Goats - Farm (not specified) - Latvia - animal sample - faeces - Clinical investigations - Industry sampling - Suspect sampling	animal		NA	1	0	Salmonella - Salmonella spp., unspecified	0
Goats - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal		NA	3	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Ostriches - farmed - Farm (not specified) - Latvia - animal sample - faeces - Monitoring - Official and industry sampling - Census	herd/flock		NA	4	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Pheasants - - Latvia - animal sample - faeces - Monitoring - Official and industry sampling - Census	herd/flock		NA	1	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal		NA	9	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official and industry sampling - Suspect sampling	animal		NA	37	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Quails - Farm (not specified) - Latvia - animal sample - faeces - Monitoring - Official and industry sampling - Census	herd/flock		NA	26	2	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	1
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	1
Sheep - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Clinical investigations - Official sampling - Suspect sampling	animal		NA	10	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Sheep - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official and industry sampling - Suspect sampling	animal		NA	10	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Solipeds, domestic - horses - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official sampling - Suspect sampling	animal		NA	1	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0

Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme	Target verification	Total units tested	Total units positive	Zoonoses	N of units positive
Solipeds, domestic - horses - Farm (not specified) - Latvia - animal sample - organ/tissue - Clinical investigations - Official sampling - Suspect sampling	animal		NA	1	0	Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0

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
Cheeses made from cows' milk - curd - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Selective sampling	single	25	Gram	100	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Cheeses made from cows' milk - fresh - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	45	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Dairy products (excluding cheeses) - butter - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	20	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Dairy products (excluding cheeses) - cream - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	25	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Dairy products (excluding cheeses) - fermented dairy products - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	10	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Dairy products (excluding cheeses) - yoghurt - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	20	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Eggs - raw material (liquid egg) for egg products - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	30	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Fish - raw - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	5	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Fish - smoked - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	85	0	Salmonella - S. 1,4,[5],12:i:-	0

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
Fish - smoked - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	85	0	Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Fishery products, unspecified - cooked - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	20	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Fishery products, unspecified - ready-to-eat - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	85	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from bovine animals - carcase - Slaughterhouse - Latvia - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single		NOT AVAILABLE	50	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from bovine animals - minced meat - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	10	Gram	5	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from broilers (Gallus gallus) - carcase - Slaughterhouse - Latvia - food sample - neck skin - Surveillance - Official sampling - Objective sampling	single	25	Gram	100	2	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	2
						Salmonella - Salmonella spp., unspecified	0
Meat from broilers (Gallus gallus) - fresh - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	120	9	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	9
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0

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
Meat from broilers (Gallus gallus) - fresh - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	145	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from broilers (Gallus gallus) - meat preparation - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	25	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from broilers (Gallus gallus) - meat preparation - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	20	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from pig - carcase - Slaughterhouse - Latvia - food sample - carcase swabs - Surveillance - Official sampling - Objective sampling	single		NOT AVAILABLE	450	2	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	1
						Salmonella - S. Bovismorbificans	1
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from pig - meat preparation - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	10	Gram	30	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from pig - meat products - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	15	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0

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
Meat from pig - meat products - Processing plant - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	15	0	Salmonella - Salmonella spp., unspecified	0
Meat from pig - minced meat - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	10	Gram	25	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from turkey - fresh - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	10	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from turkey - meat products - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	20	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat from turkey - minced meat - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	5	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat, mixed meat - meat preparation - Retail - Unknown - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	25	Gram	145	10	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	3
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	4
						Salmonella - S. Typhimurium	3
						Salmonella - Salmonella spp., unspecified	0
Meat, mixed meat - minced meat - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	10	Gram	70	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0

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
Meat, mixed meat - minced meat - Retail - European Union - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	10	Gram	70	0	Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Meat, mixed meat - minced meat - Retail - Latvia - food sample (not specified) - Surveillance - Official sampling - Objective sampling	single	10	Gram	10	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Agona	0
						Salmonella - S. Bovismorbificans	0
						Salmonella - S. Derby	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Infantis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0

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
Compound feedingstuffs for fish - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	1	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Compound feedingstuffs for pigs - final product - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	1	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Compound feedingstuffs for poultry (non specified) - final product - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	1	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Compound feedingstuffs for poultry, breeders - final product - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	3	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Compound feedingstuffs for poultry, broilers - final product - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	6	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Compound feedingstuffs for poultry, laying hens - final product - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	20	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Compound feedingstuffs, not specified - final product - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	3	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0
Feed material of cereal grain origin - wheat derived - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	1	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0

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
Feed material of marine animal origin - fish meal - Feed mill - Latvia - feed sample - Surveillance - Official sampling - Objective sampling	batch	25	Gram	4	0	Salmonella - S. 1,4,[5],12:i:-	0
						Salmonella - S. Enteritidis	0
						Salmonella - S. Typhimurium	0
						Salmonella - Salmonella spp., unspecified	0

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
Cats - - Latvia - animal sample - blood - Clinical investigations - Not applicable - Suspect sampling	animal	66	16	Toxoplasma - T. gondii	16
				Toxoplasma - Toxoplasma spp., unspecified	0
Cats - pet animals - - Latvia - animal sample - blood - Clinical investigations - Not applicable - Suspect sampling	animal	28	14	Toxoplasma - T. gondii	14
				Toxoplasma - Toxoplasma spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	2	0	Toxoplasma - T. gondii	0
				Toxoplasma - Toxoplasma spp., unspecified	0
Dogs - - Latvia - animal sample - blood - Clinical investigations - Not applicable - Suspect sampling	animal	45	5	Toxoplasma - T. gondii	5
				Toxoplasma - Toxoplasma spp., unspecified	0
Dogs - pet animals - - Latvia - animal sample - blood - Clinical investigations - Not applicable - Suspect sampling	animal	8	1	Toxoplasma - T. gondii	1
				Toxoplasma - Toxoplasma spp., unspecified	0
Sheep - Farm (not specified) - Latvia - animal sample - blood - Clinical investigations - Industry sampling - Suspect sampling	animal	10	0	Toxoplasma - T. gondii	0
				Toxoplasma - Toxoplasma spp., unspecified	0

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
Bears - wild - Hunting - Latvia - animal sample - organ/tissue - NOT AVAILABLE - Not applicable - NOT AVAILABLE	animal	1	1	Trichinella - T. britovi	0
				Trichinella - T. spiralis	0
				Trichinella - Trichinella spp., unspecified	1
Beavers - wild - Hunting - Latvia - animal sample - organ/tissue - NOT AVAILABLE - Not applicable - NOT AVAILABLE	animal	1	0	Trichinella - T. britovi	0
				Trichinella - T. spiralis	0
				Trichinella - Trichinella spp., unspecified	0
Lynx - wild - Hunting - Latvia - animal sample - organ/tissue - NOT AVAILABLE - Not applicable - NOT AVAILABLE	animal	1	1	Trichinella - T. britovi	0
				Trichinella - T. spiralis	0
				Trichinella - Trichinella spp., unspecified	1
Pigs - Slaughterhouse - Latvia - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	420776	1	Trichinella - T. britovi	1
				Trichinella - T. spiralis	0
				Trichinella - Trichinella spp., unspecified	0
Solipeds, domestic - horses - Slaughterhouse - Latvia - animal sample - organ/tissue - Surveillance - Official sampling - Census	animal	289	0	Trichinella - T. britovi	0
				Trichinella - T. spiralis	0
				Trichinella - Trichinella spp., unspecified	0
Wild boars - wild - Hunting - Latvia - animal sample - organ/tissue - Surveillance - Official and industry sampling - Census	animal	5579	73	Trichinella - T. britovi	0
				Trichinella - T. spiralis	0
				Trichinella - Trichinella spp., unspecified	73

Table WEST NILE VIRUS in animal

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
Solipeds, domestic - horses - Farm (not specified) - Latvia - animal sample - blood - Monitoring - passive - Industry sampling - Suspect sampling	animal	No	6	0	West Nile virus	0

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
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - blood - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	49	27	Yersinia - Y. enterocolitica	27
				Yersinia - Y. enterocolitica - O:3	0
				Yersinia - Y. enterocolitica - O:9	27
				Yersinia - Y. enterocolitica - Y. enterocolitica, unspecified	0
				Yersinia - Y. pseudotuberculosis	0
				Yersinia - Yersinia spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - faeces - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	15	0	Yersinia - Y. enterocolitica	0
				Yersinia - Y. enterocolitica - O:3	0
				Yersinia - Y. enterocolitica - O:9	0
				Yersinia - Y. enterocolitica - Y. enterocolitica, unspecified	0
				Yersinia - Y. pseudotuberculosis	0
				Yersinia - Yersinia spp., unspecified	0
Cattle (bovine animals) - Farm (not specified) - Latvia - animal sample - foetus/stillbirth - Monitoring - passive - Official sampling - Suspect sampling	animal	1	1	Yersinia - Y. enterocolitica	0
				Yersinia - Y. enterocolitica - O:3	0
				Yersinia - Y. enterocolitica - O:9	0
				Yersinia - Y. enterocolitica - Y. enterocolitica, unspecified	0
				Yersinia - Y. pseudotuberculosis	1
				Yersinia - Yersinia spp., unspecified	0
Goats - Farm (not specified) - Latvia - animal sample - faeces - Monitoring - passive - Industry sampling - Suspect sampling	animal	1	0	Yersinia - Y. enterocolitica	0
				Yersinia - Y. enterocolitica - O:3	0
				Yersinia - Y. enterocolitica - O:9	0
				Yersinia - Y. enterocolitica - Y. enterocolitica, unspecified	0
				Yersinia - Y. pseudotuberculosis	0
				Yersinia - Yersinia spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - blood - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	34	2	Yersinia - Y. enterocolitica	2
				Yersinia - Y. enterocolitica - O:3	0
				Yersinia - Y. enterocolitica - O:9	2
				Yersinia - Y. enterocolitica - Y. enterocolitica, unspecified	0

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
Pigs - Farm (not specified) - Latvia - animal sample - blood - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	34	2	Yersinia - Y. pseudotuberculosis	0
				Yersinia - Yersinia spp., unspecified	0
Pigs - Farm (not specified) - Latvia - animal sample - organ/tissue - Monitoring - passive - Official and industry sampling - Suspect sampling	animal	27	0	Yersinia - Y. enterocolitica	0
				Yersinia - Y. enterocolitica - O:3	0
				Yersinia - Y. enterocolitica - O:9	0
				Yersinia - Y. enterocolitica - Y. enterocolitica, unspecified	0
				Yersinia - Y. pseudotuberculosis	0
				Yersinia - Yersinia spp., unspecified	0

Foodborne Outbreaks: summarized data

		Outbreak strenght	Strong				Weak			
Causative agent	**Food vehicle**		**N outbreaks**	**N human cases**	**N hospitalized**	**N deaths**	**N outbreaks**	**N human cases**	**N hospitalized**	**N deaths**
Calicivirus - norovirus (Norwalk-like virus)	Unknown						85	246	143	0
Campylobacter - C. jejuni	Unknown						2	4	1	0
Rotavirus	Unknown						269	646	525	0
Salmonella - S. Bovismorbificans	Unknown						1	2	1	0
Salmonella - S. Enteritidis	Bakery products		1	4	2	0				
	Eggs and egg products		1	3	2	0				
	Unknown						14	82	24	0
Salmonella - S. Typhimurium	Unknown						3	6	4	0
Staphylococcal enterotoxins - Enterotoxin, unspecified	Bakery products		1	15	14	0	1	4	4	0
Trichinella - T. spiralis	Meat and meat products						1	3	1	0
Unknown	Unknown						111	287	206	0
Yersinia - Y. enterocolitica	Unknown						1	2	1	0

Strong Foodborne Outbreaks: detailed data

Causative agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Salmonella - S. Enteritidis		Household / domestic kitchen	Bakery products		Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Unknown	Latvia	Cross-contamination		1	4	2	0
			Eggs and egg products		Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Unknown	Latvia	Inadequate heat treatment		1	3	2	0
Staphylococcal enterotoxins - Enterotoxin, unspecified		General	Bakery products	creme	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Temporary mass catering (fairs or festivals)	Temporary mass catering (fairs or festivals)	Latvia	Cross-contamination		1	15	14	0

Weak Foodborne Outbreaks: detailed data

Causative agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N human cases	N hosp.	N deaths
Calicivirus - norovirus (Norwalk-like virus)		Unknown	Unknown		Unknown	Unknown	Unknown	Unknown	Unknown	||ZOO_CAT_PARAM_ZOO: 'Viruses - Norovirus||	85	246	143	0
Campylobacter - C. jejuni		Household / domestic kitchen	Unknown		Descriptive epidemiological evidence	Household	Unknown	Unknown	Unknown		2	4	1	0
Rotavirus		Unknown	Unknown		Unknown	Unknown	Unknown	Unknown	Unknown		269	646	525	0
Salmonella - S. Bovismorbificans		Unknown	Unknown		Unknown	Unknown	Unknown	Unknown	Unknown		1	2	1	0
Salmonella - S. Enteritidis		Unknown	Unknown		Unknown	Unknown	Unknown	Unknown	Unknown		14	82	24	0
Salmonella - S. Typhimurium		Household / domestic kitchen	Unknown		Descriptive epidemiological evidence	Household	Household	Latvia	Unknown		3	6	4	0
Staphylococcal enterotoxins - Enterotoxin, unspecified		Household / domestic kitchen	Bakery products	creme	Detection of causative agent in food vehicle or its component - Detection of indistinguishable causative agent in humans	Household	Household	Latvia	Unknown		1	4	4	0
Trichinella - T. spiralis		Household / domestic kitchen	Meat and meat products		Descriptive epidemiological evidence	Household	Others	Latvia	Inadequate heat treatment		1	3	1	0
Unknown		Unknown	Unknown		Unknown	Unknown	Unknown	Unknown	Unknown		100	232	153	0
				Rota + Norwalk virus	Unknown	Unknown	Unknown	Unknown	Unknown		11	55	53	0
Yersinia - Y. enterocolitica		Household / domestic kitchen	Unknown		Unknown	Household	Unknown	Unknown	Unknown		1	2	1	0

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 Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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	**92**	**92**	**92**	**92**	**92**	**92**
MIC	**N of resistant isolates**	**3**	**1**	**92**	**1**	**92**	**22**
<=0.12		7					
<=0.25			1				
0.25		30					
<=0.5							56
0.5		44	13				
<=1					90		
1		5	43	1			14
2		3	29	1	1		1
4		2	5	4			1
8		1	1	38			
16				44			
>16				4			
32						20	1
64						38	5
>64						34	14
>128					1		

Table Antimicrobial susceptibility testing of Salmonella - S. 4,12:-:1,2 in Quails - laying hens

Sampling Stage: Farm (not specified) | Sampling Type: animal sample - faeces | Sampling Context: Monitoring

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

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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**	**1**	**0**	**0**
<=0.03				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												
>1024													1		

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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											
<=0.25					1			1							1
<=0.5		1				1									
0.5							1								
<=1											1				
<=2														1	
2										1					
4									1						
<=8			1												
32												1			
64													1		

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Unknown

	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			1							
<=0.5		1				1									
0.5															1
<=2														1	
2										1	1				
<=4												1			
4									1						
<=8			1												
128													1		

Sampling Stage: Slaughterhouse

Sampling Type: food sample - carcase swabs

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Unknown

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	**2**	**16**	**0.5**	**2**	**0.064**	**8**	**2**	**16**	**256**	**8**	**2**
	Lowest limit	**0.25**	**2**	**0.06**	**0.25**	**0.008**	**0.5**	**2**	**4**	**8**	**1**	**0.5**
	Highest limit	**32**	**64**	**4**	**16**	**8**	**32**	**4**	**64**	**1024**	**64**	**32**
	N of tested isolates	**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**	**1**	**1**
0.06						1						
0.12				1								
0.5					1							
1		1										
<=2								1				
<=4									1			
8			1									
>32							1					1
>64											1	
>1024										1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	**2**	**16**	**0.5**	**2**	**0.064**	**8**	**2**	**16**	**256**	**8**	**2**
	Lowest limit	**0.25**	**2**	**0.06**	**0.25**	**0.008**	**0.5**	**2**	**4**	**8**	**1**	**0.5**
	Highest limit	**32**	**64**	**4**	**16**	**8**	**32**	**4**	**64**	**1024**	**64**	**32**
	N of tested isolates	**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**	**1**	**1**
0.03						1						
0.12				1								
<=0.25		1			1							
<=2								1				
<=4									1			
8			1									
>32							1					1
64											1	
>1024										1		

Table Antimicrobial susceptibility testing of Salmonella - S. Derby in Meat, mixed meat - meat preparation - intended to be eaten cooked - chilled

Sampling Stage: Retail

Sampling Type: food sample (not specified)

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Lithuania

	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			1							
<=0.5		1				1									
0.5															1
<=1										1					
<=2														1	
2											1				
<=4												1			
4									1						
<=8			1												
256													1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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							1								
<=0.25					1										
<=0.5		1				1									
0.5								1							1
2										1					
<=4												1			
4									1		1			1	
<=8			1												
64													1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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							1								
<=0.25					1			1							
<=0.5						1									
0.5															1
1		1													
<=2														1	
2										1					
<=4												1			
4									1		1				
<=8			1												
32													1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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**
<=0.015							1								
<=0.03				1											
<=0.25					1										1
<=0.5		1				1									
0.5								1							
<=2														1	
2										1					
4									1		1				
<=8			1												
8												1			
64													1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	**2**	**16**	**0.125**	**0.5**	**2**	**0.064**	**1**	**16**	**8**	**2**	**16**	**8**	**2**
	Lowest limit	**0.5**	**8**	**0.03**	**0.25**	**0.5**	**0.015**	**0.25**	**2**	**1**	**1**	**4**	**2**	**0.25**
	Highest limit	**32**	**128**	**16**	**4**	**8**	**8**	**8**	**64**	**64**	**16**	**128**	**64**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**
<=0.03				1										
0.03							1							
<=0.25					1									
<=0.5		1				1								
0.5								1						1
<=2													1	
2										1				
4									1		1			
<=8			1											
8												1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Monitoring

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	AM substance	Sulfonamides - Sulfamethoxazole
	ECOFF	**256**
	Lowest limit	**8**
	Highest limit	**1024**
	N of tested isolates	**1**
MIC	**N of resistant isolates**	**0**
64		1

Sampling Stage: Unspecified

Sampling Type: food sample - meat

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Poland

	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**	**1**	**1**	**0**	**0**	**0**
	<=0.03			1											
	<=0.25				1										
	0.25						1								
	<=0.5	1				1									
	0.5							1							1
	<=2													1	
	2									1					
	4								1		1				
	<=8		1												
	64												1		
	>128											1			

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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							1								
<=0.25					1										
<=0.5		1				1									
0.5								1							1
<=2														1	
2										1					
<=4												1			
4									1		1				
<=8			1												
64													1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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							1								
<=0.25					1										
<=0.5		1				1									
0.5								1							1
<=2														1	
2										1					
<=4												1			
4									1		1				
<=8			1												
64													1		

Sampling Stage: Unspecified

Sampling Type: food sample - meat

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Poland

	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**
<=0.015							1								
<=0.03				1											
<=0.25					1										
<=0.5		1				1									
0.5								1							1
<=2														1	
2										1					
<=4												1			
4									1		1				
<=8			1												
64													1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	**2**	**16**	**0.5**	**2**	**0.064**	**8**	**2**	**16**	**256**	**8**	**2**
	Lowest limit	**0.25**	**2**	**0.06**	**0.25**	**0.008**	**0.5**	**2**	**4**	**8**	**1**	**0.5**
	Highest limit	**32**	**64**	**4**	**16**	**8**	**32**	**4**	**64**	**1024**	**64**	**32**
	N of tested isolates	**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**
0.03						1						
<=0.06				1								
<=0.25					1							
<=0.5												1
0.5		1										
1							1					
<=2								1				
2											1	
<=4									1			
8			1									
32										1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	**2**	**16**	**0.5**	**2**	**0.064**	**8**	**2**	**16**	**256**	**8**	**2**
	Lowest limit	**0.25**	**2**	**0.06**	**0.25**	**0.008**	**0.5**	**2**	**4**	**8**	**1**	**0.5**
	Highest limit	**32**	**64**	**4**	**16**	**8**	**32**	**4**	**64**	**1024**	**64**	**32**
	N of tested isolates	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**
0.015						1						
0.03						2						
0.12				4		1						
<=0.5												4
0.5		3			4							
1		1										
<=2								4				
2							4				4	
<=4									3			
8			4									
32										2		
64										1		
>64									1			
256										1		

Table Antimicrobial susceptibility testing of Salmonella - S. Infantis in Meat, mixed meat - minced meat - intended to be eaten cooked - frozen

Sampling Stage: Retail

Sampling Type: food sample (not specified)

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Unknown

	AM substance	Aminoglycosides - Gentamicin	Amphenicols - Chloramphenicol	Cephalosporins - Cefotaxime	Cephalosporins - Ceftazidime	Fluoroquinolones - Ciprofloxacin	Penicillins - Ampicillin	Polymyxins - Colistin	Quinolones - Nalidixic acid	Sulfonamides - Sulfamethoxazole	Tetracyclines - Tetracycline	Trimethoprim
	ECOFF	**2**	**16**	**0.5**	**2**	**0.064**	**8**	**2**	**16**	**256**	**8**	**2**
	Lowest limit	**0.25**	**2**	**0.06**	**0.25**	**0.008**	**0.5**	**2**	**4**	**8**	**1**	**0.5**
	Highest limit	**32**	**64**	**4**	**16**	**8**	**32**	**4**	**64**	**1024**	**64**	**32**
	N of tested isolates	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
MIC	**N of resistant isolates**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**0**
<=0.06				1								
<=0.25		1			1							
0.25						1						
<=0.5							1					1
<=2								1				
8			1									
64											1	
>64									1			
>1024										1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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**
<=0.015							1								
<=0.03				1											
<=0.25					1										1
<=0.5		1				1									
0.5								1							
<=2														1	
2										1					
<=4												1			
4									1		1				
<=8			1												
16													1		

Table Antimicrobial susceptibility testing of Salmonella - S. Typhimurium - DT 104 in Meat, mixed meat - meat preparation - intended to be eaten cooked - chilled

Sampling Stage: Retail

Sampling Type: food sample (not specified)

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Poland

	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**	**0**	**0**
<=0.03				1											
<=0.25					1			1							1
0.25							1								
<=0.5		1				1									
<=1											1				
<=2														1	
2										1					
4									1						
<=8			1												
>128												1			
>1024													1		

Sampling Stage: Farm (not specified)

Sampling Type: animal sample - faeces

Sampling Context: Surveillance

Sampler: Official sampling

Sampling Strategy: Census

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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			1							
<=0.5						1									
<=1										1					
1		1													1
<=2									1					1	
2											1				
<=4												1			
<=8			1												
32													1		

Table Antimicrobial susceptibility testing of Salmonella - S. Typhimurium - DT 120 in Meat from pig - minced meat - intended to be eaten cooked - frozen

Sampling Stage: Retail

Sampling Type: food sample (not specified)

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: OTHER AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Unknown

	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**	**1**	**0**	**0**	**0**	**1**	**0**
<=0.03				1											
0.06							1								
<=0.25					1			1							1
<=0.5						1									
<=1											1				
1		1													
<=4												1			
4									1						
<=8			1												
32													1		
>64										1				1	

Table Antimicrobial susceptibility testing of Salmonella - S. Typhimurium - DT 141 in Meat from broilers (Gallus gallus) - carcase (not specified)

Sampling Stage: Slaughterhouse

Sampling Type: food sample - neck skin

Sampling Context: Control and eradication programmes

Sampler: Official sampling

Sampling Strategy: Objective sampling

Programme Code: AMR MON

Analytical Method: Micromethod dilution (in microtiter plate) (not specified)

Country of Origin: Latvia

	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**	**0**	**0**
<=0.03				1											
<=0.25					1										1
<=0.5		1				1									
0.5							1	1							
<=1										1	1				
<=2														1	
4									1						
<=8			1												
64												1			
>1024													1		

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: Micromethod dilution (in microtiter plate) (not specified)

Country of OriginLatvia

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	NOT AVAILABLE	Positive/Present	NOT AVAILABLE		NOT AVAILABLE
Ceftazidime synergy test	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	Positive/Present	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	128
N of tested isolates	48	48	48	48	48	48	48	48	48	48	48	48
N of resistant isolates	1	1	0	40	45	15	43	13	13	9	9	0
MIC												
<=0.015	38											
<=0.03			46									
0.03	8											
<=0.06				3				4	29			
0.06	1								2			
<=0.12		28								4	21	
0.12			2	5						1	2	
<=0.25					3		4					
0.25		17		4						3	7	
0.5		2		2	1		1	1	1		1	
1				13	3		6	1			1	
2				12	6	2	6	3				
>2	1											
4				5	13	19	5	5		5	1	5
8				2	11	12	15	2		1		40
16					7	2	8					3
>16		1										
32				1	3	6	2					
>32				1								
64						7	1					
>64					1							
128										1		

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: Micromethod dilution (in microtiter plate) (not specified)

Country of OriginLatvia

	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	**147**	**147**	**147**	**147**	**147**	**147**	**147**	**147**	**147**	**143**	**147**	**147**	**147**	**147**
MIC	**N of resistant isolates**	**4**	**48**	**0**	**45**	**44**	**135**	**0**	**0**	**78**	**0**	**127**	**75**	**78**	**53**
<=0.015							9								
<=0.03				145											
0.03							1								
0.06				2			2								
0.12							1								
<=0.25					102			105							55
0.25							14								
<=0.5		57				103									
0.5					2		9	41							29
<=1											114				
1		73			3	8	26	1			1				8
<=2									11					55	
2		13			7	5	3			15	28			1	2
<=4												11			
4		2			13	6	12		59	49				12	1
>4					20										
<=8			96										28		
8						13	48		76	5		1		1	
>8						12	22								
16			3						1			8	18		
32			10									1	24		
>32		2													52
64			15									1	2	1	
>64										78				77	
128			19									11	1		
>128			4									114			
>1024													74		