

Kosovo

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

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

IN 2023

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 Kosovo during the year 2023.

The information covers the occurrence of these diseases and agents in animals, foodstuffs and in some cases also in feedingstuffs. In addition the report includes data on antimicrobial resistance in some zoonotic agents and indicator bacteria as well as information on epidemiological investigations of foodborne outbreaks.

Complementary data on susceptible animal populations in the country is also given. The information given covers both zoonoses that are important for the public health in the whole European Union as well as zoonoses, which are relevant on the basis of the national epidemiological situation.

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

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

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

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

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

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ANIMAL POPULATION TABLES

Table Susceptible animal population

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DISEASE STATUS TABLES

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DISEASE STATUS TABLES

PREVALENCE TABLES

Table BRUCELLA:Brucella in animal

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit	total units tested	total units positive	Zoonoses	N units positive
Not Available	Cattle (bovine animals) - Farm - Not Available - Not Available - Surveillance - Official sampling - Census	N_A	Rose Bengal plate test (RBT)/Buffered Brucella antigen test (BBAT)	animal	6000	21	Brucella abortus	21
	Sheep and goats - Farm - Not Available - Not Available - Surveillance - Official sampling - Census	N_A	Rose Bengal plate test (RBT)/Buffered Brucella antigen test (BBAT)	animal	2000	2	Brucella melitensis	2

Table MYCOBACTERIUM:Mycobacterium in animal

Area of sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling Details	Method	Sampling unit tested	total units tested	total units positive	Zoonoses	N units positive
Not Available	Cattle (bovine animals) - Farm - Not Available - Not Available - Surveillance - Official sampling - Census	N_A	Skin test	animal	25000	17	Mycobacterium bovis	17

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

when numbers referring to cases, hospitalized people and deaths are reported as unknown, they will be not included in the sum calculation

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Strong Foodborne Outbreaks: detailed data

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Weak Foodborne Outbreaks: detailed data

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ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

ANTIMICROBIAL RESISTANCE TABLES FOR ESCHERICHIA COLI

OTHER ANTIMICROBIAL RESISTANCE TABLES

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

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

Latest Transmission set

Table Name	Last submitted dataset transmission date
Prevalence	22-Jul-2024

KOSOVO

TEXT FORMS FOR THE 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 2023

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1. Institutions and Laboratories involved in zoonoses monitoring and reporting

KFVA is responsible for the monitoring and controlling of zoonotic diseases, and the KFV Laboratory as part of this institution is responsible for the diagnosis of zoonotic diseases

Short description of the institutions and laboratories involved in data collection and reporting

2. Animal population

2.1. Sources of information and the date(s) (months, years) the information relates to ^(a)

Based on the data from the Identification and Registration system of Animal Population in Kosovo updated on June 2023: Cattle 277763, Sheep and Goats 170,254, Pigs 69578, Poultry 1,300,000 in commercial farms,

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

Big Commercial Farms from 50 and more, small commercial farms less than 50. Backyard or family farm less than 10. Small Family farm less than 5.

2.3. National changes of the numbers of susceptible population and trends

We also have farms with susceptible animal population in a considerable number

2.4. Geographical distribution and size distribution of the herds, flocks and holdings ^(b)

All farms are equally spread throughout the whole territory of Kosovo

2.5. Additional information

<http://84.22.58.106/IR>

This is the link for Kosovo Identification and Registration of Animals
Cattle / sheep / goats / pigs / Owner Dogs

(a): National identification and registration system(s), source of reported statistics (Eurostat, others)

(b): Link to website with density maps if available, tables with number of herds and flocks according to geographical area

3. General evaluation*: Please add the zoonotic agent
3.1. History of the disease and/or infection in the country^(a)
Cattle Bovine Brucellosis (Brucella abortus), Sheep and goats (Brucella melitensis), Cattle animals (Mycobacterium bovis)
3.2. Evaluation of status, trends and relevance as a source for humans
The epidemiological situation in Kosovo regarding these 3 diseases is endemic
3.3. Any recent specific action in the Member State or suggested for the European Union^(b)
Through the different project financed by the EU, FAO, World Bank, EFSA.
3.4. Additional information
KFVA, Animal Health Directorate has adapted the Surveillance program for control, prevention and eradication of those diseases. Rabies. Avian Influenza, African Swine fever, Classical Swine Fever. New Castle disease etc
<p>* For each zoonotic agent</p> <p>(a): Epidemiological evaluation (trends and sources) over time until recent/current situation for the different relevant matrixes (food, feed, animal). If relevant: the official "disease status" to be specified for the whole country and/or specific regions within the country</p> <p>(b): If applicable</p>

4. Description of Monitoring/Surveillance/Control programmes system*: Please add the matrix and zoonotic agent

4.1. Monitoring/Surveillance/Control programmes system^(a)

Directorate of Animal Health and Welfare (DAHWW) annually based on risk assessment prepares the plan for random samples. A total of 6000 blood samples (cattle, sheep, goats) annually collected for programs aimed at preventing, controlling, and eradicating animal diseases. Samples are collected in the field by contracted veterinary practitioners. All samples are tested in National Referent Laboratory (Kosovo Food and Veterinary Laboratory)

4.2. Measures in place^(b)

If positive results are obtained, the sample size will be increased to include the particle area. A positive animal will be slaughtered and buried, and its owner will receive compensation based on market prices.

4.3. Notification system in place to the national competent authority^(c)

The notification system is in place and private veterinary practitioners are trained to notify diseases through the Disease Notification System

4.4. Results of investigations and national evaluation of the situation, the trends ^(d) and sources of infection^(e)

Based on the number of cases presented during the last year, epidemiological research shows that we have a prevalence of less than 2% for Tuberculosis or Brucellosis

4.5. Additional information

In the event that private veterinary practitioners report suspected cases, the KFVA will sample all farms and investigate all closed farms for confirmed cases. Positive animals will be slaughtered and buried. The owner will be compensated based on the market price. Farm owners, whether commercial or backyard, will recommend a medical examination to test for Tuberculosis or Brucellosis.

*** For all combinations of zoonotic agents and matrix (Food, Feed and Animals) for 'Prevalence' and 'Disease Status': one text form reported per each combination of matrix/zoonoses or zoonotic agent**

(a): Sampling scheme (sampling strategy, frequency of the sampling, type of specimen taken, methods of sampling (description of sampling techniques) + testing scheme (case definition, diagnostic/analytical methods used, limit of detection of the method, diagnostic flow (parallel testing, serial testing) to assign and define cases. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(b): The control program/strategies in place, including vaccination if relevant. If applicable a description of how eradication measures are/were implemented, measures in case of the positive findings or single cases; any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation, if applicable. If programme approved by the EC, please provide link to the specific programme in the Commission's website.

(c): Mandatory: Yes/No.

(d): Minimum five years.

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

5. Food-borne Outbreaks

5.1. System in place for identification, epidemiological investigations and reporting of food-borne outbreaks

At the inter-institutional level, we have permanent cooperation with National Institute of Public Health. The two institutions report positive cases in humans and positive cases in animals

5.2. Description of the types of outbreaks covered by the reporting

During this Year 2023, 21 cases have been reported of *Brucella abortus* and 2 cases for *Brucella Melitenses*, in Sheep and Goats

5.3. National evaluation of the reported outbreaks in the country^(a)

From 2023 KFVA have access for reporting outbreaks of disease in ADIS System

5.4. Descriptions of single outbreaks of special interest

They were infected with *Brucella melitensis* after consuming cheese from a merchant who has a goat farm that uses fresh milk that is not pasteurized. The people became infected with *Brucella melitensis* after consuming the cheese. National Institute for Public Health has collaborated with us on an information campaign

5.5. Control measures or other actions taken to improve the situation

Following the NIPH's information, our inspectors visited the farm and examined the blood. The positive animals and the remaining products were destroyed in accordance with the relevant legislation. On the other hand, activity on the farm has been stopped

5.6. Any specific action decided in the Member State or suggested for the European Union as a whole on the basis of the recent/current situation

5.7. Additional information

In 2024, based on the annual plan for the monitoring of zoonotic diseases of animals, it is predicted 6000 samples for diagnostic research for Brucellosis disease in cattle, sheep and goats. Also it is planned for the tuberculation test that 20,000 heads of cattle were previously tested. Additionally, we are also prepared for all suspected cases which will be reported from Slaughterhouses or NIPH cases which will be reported in Human Detection

(a): Trends in numbers of outbreaks and numbers of human cases involved, relevance of the different causative agents, food categories and the agent/food category combinations, relevance of the different type of places of food production and preparation in outbreaks, evaluation of the severity of the human cases.

6. Institutions and laboratories involved in antimicrobial resistance monitoring and reporting

For the moment we don't have a laboratory for antimicrobial resistance, all those samples are send to Skopje

Short description of the institutions and laboratories involved in data collection and reporting

7. General Antimicrobial Resistance Evaluation

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

Write text here please

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

Write text here please

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

Write text here please

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

Write text here please

7.5. Additional information

(a): The CIAs depends on the bacterial species considered and the harmonised set of substances tested within the framework of the harmonised monitoring:

- For *Campylobacter* spp., macrolides (erythromycin) and fluoroquinolones (ciprofloxacin);
- For *Salmonella* and *E. coli*, 3rd and 4th generation cephalosporins (cefotaxime) and fluoroquinolones (ciprofloxacin) and colistin (polymyxin);

8. General Description of Antimicrobial Resistance Monitoring*; Please add the matrix and bacterial species

8.1. General description of sampling design and strategy^(a)

Write text here please

8.2. Stratification procedure per animal population and food category

Write text here please

8.3. Randomisation procedure per animal population and food category

Write text here please

8.4. Analytical method used for detection and confirmation^(b)

Write text here please

8.5. Laboratory methodology used for detection of antimicrobial resistance^(c)

Write text here please

8.6. Library preparation used

Write text here please

8.7. Version of the predictive tool

Write text here please

8.8. Results of investigation

Write text here please

8.9. Additional information

Write text here please

*** to be filled in per combination of bacterial species/matrix**

(a): Method of sampling (description of sampling technique: stage of sampling, type of sample, sampler), Frequency of sampling, Procedure of selection of isolates for susceptibility testing, Method used for collecting data.

(b): Analytical method used for detection and confirmation: according to the legislation, the protocols developed by the EURL-AR should be used and reported here. In the case of the voluntary specific monitoring on Carbapenemase-producers, the

selective media used (commercial plates, 'in house' media) should be also reported here. In general, any variation with regard to the EURL-AR protocols should be stated here, number of isolates isolated per sample, in particular for *Campylobacter* spp..

(c): Antimicrobials included, Cut-off values