# efsa European Food Safety Authority

# ZOONOSES MONITORING

# **CYPRUS**

The Report referred to in Article 9 of Directive 2003/99/EC

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

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

IN 2008

# INFORMATION ON THE REPORTING AND MONITORING SYSTEM

Country: Cyprus

Reporting Year:

#### **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 Cyprus during the year 2008.

The information covers the occurrence of these diseases and agents in humans, animals, foodstuffs and in some cases also in feedingstuffs. In addition the report includes data on antimicrobial resistance in some zoonotic agents and commensal 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 Community 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 Community 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 Community Summary Report on zoonoses that is published each year by EFSA.

<sup>\*</sup> 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.

#### A. Information on susceptible animal population

#### **Sources of information:**

The information furnished derives from the Veterinary Services' database

#### Dates the figures relate to and the content of the figures:

The numbers represent the number of animals present on May 2008.

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

The total bovine population is estimated to 56,722 animals, reared in 350 herds. The population under the brucellosis program is 38,824 animals in 322 herds.

The total sheep and goat population is estimated to 329,166 and 305,124 animals, respectively, reared in 3,576 herds. The population under the brucellosis program is 566,482 animals in 3,427 flocks.

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

The animal population is allocated as follows:

#### **Bovine Herds:**

70 herds with 1-5 animals, 21 herds with 6-10 animals, 20 herds with 11-25 animals, 14 herds with 26-50 animals, 23 herds with 51-100 animals, 93 herds with 101-200 animals, 47 herds with 201-300 animals and 62 herds with more than 301 animals.

The Total number of bovine herds is 350.

#### Sheep and goat Herds:

331 flocks with 1-5 animals, 291 flocks with 6-10 animals, 576 flocks with 11-25 animals, 503 flocks with 26-50 animals, 468 flocks with 51-100 animals, 501 flocks with 101-200 animals, 246 flocks with 201-300 animals and 660 flocks with more than 301 animals.

The Total number of Sheep and Goat flocks is 3,576.

# **Table Susceptible animal populations**

	Number of he	erds or flocks		slaughtered nals	Livestock n anin	umbers (live nals)	Number of holdings		
Animal species	Category of animals		Year		Year		Year		Year
Cattle (bovine animals)	calves (under 1 year)			5463		16311			
	in total	349						349	
	mixed herds	349		18581		54435		349	
Goats	animals over 1 year			30063		444129			
	animals under 1 year			176360		109666			
	in total							3417	
	mixed herds	3417		207613		558292		3417	
Sheep	animals over 1 year			30063		444129			
	animals under 1 year (lambs)			176360		109666			
	in total	3417							
	mixed herds	3417		207613		558292		3417	

#### 2. 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.

#### 2.1 SALMONELLOSIS

#### 2.1.1 General evaluation of the national situation

#### A. General evaluation

#### History of the disease and/or infection in the country

Over the last years a surveilance program has been applied by the Veterinary Services covering the poultry sector. Foods of animal origin are examined for Samonella on a regular basis

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

Nowadays data exist for poultry and foods of animal origin.

#### 2.1.2 Salmonellosis in humans

#### A. Salmonellosis in humans

#### Reporting system in place for the human cases

YES, SINCE 1932

#### Case definition

EU RECOMMENDED CASE DEFINITION SINCE JANUARY 2004

#### Diagnostic/analytical methods used

EU RECOMMENDED MICROBIOLOGY LABORATORY DIAGNOSTIC CRITERIA.

#### **Notification system in place**

QUARANTINE(PUBLIC HEALTH) LAW AND REGULATIONS AND AMENDMENTS. MANDATORY NOTIFIABLE SINCE 1932

#### History of the disease and/or infection in the country

SPORADIC CASES ARE REPORTED YEARLY AS WELL AS OCCASIONAL SMALL OUTBREAKS. ACTIVE SURVEILLANCE IS IN PLACE AS WELL AS CASE BY CASE INVESTIGATION BY THE ENVIRONMENTAL HEALTH INSPECTORS

#### Relevance as zoonotic disease

SURVEILLANCE OF HUMAN CASES IS ACTIVE BEARING IN MIND THE NEED TO EVALUATE PREVENTION PROGRAMMES AS WELL AS THE EARLY DIAGNOSIS OF CASES AND PREVENTION OF FURTHER CASES

#### 2.1.3 Salmonella in foodstuffs

#### A. Salmonella spp. in eggs and egg products

**Monitoring system** 

**Sampling strategy** 

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

Eggs at egg packing centres (foodstuff based approach)

NO DATA AVAILABLE

Eggs at retail

NO DATA AVAILABLE

Raw material for egg products (at production plant)

NO DATA AVAILABLE

Egg products (at production plant and at retail)

NO DATA AVAILABLE

**Definition of positive finding** 

Eggs at egg packing centres (foodstuff based approach)

NO DATA AVAILABLE

Eggs at retail

NO DATA AVAILABLE

**Raw material for egg products (at production plant)** 

NO DATA AVAILABLE

Egg products (at production plant and at retail)

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings

NO DATA AVAILABLE

#### **Notification system in place**

NO DATA AVAILABLE

#### Results of the investigation

NO DATA AVAILABLE

# National evaluation of the recent situation, the trends and sources of infection NO DATA AVAILABLE

# Relevance of the findings in animals to findings in foodstuffs and to human cases $\ensuremath{\mathsf{NO}}\xspace$ DATA AVAILABLE

#### **Additional information**

NO DATA AVAILABLE

#### B. Salmonella spp. in broiler meat and products thereof

**Monitoring system** 

**Sampling strategy** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Definition of positive finding** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

#### C. Salmonella spp. in turkey meat and products thereof

**Monitoring system** 

**Sampling strategy** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Definition of positive finding** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

#### D. Salmonella spp. in pig meat and products thereof

**Monitoring system** 

**Sampling strategy** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Definition of positive finding** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

#### **Results of the investigation**

NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases  $\ensuremath{\mathsf{NO}}\xspace$  DATA AVAILABLE

#### **Additional information**

NO DATA AVAILABLE

#### E. Salmonella spp. in bovine meat and products thereof

**Monitoring system** 

**Sampling strategy** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Definition of positive finding** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

#### **Results of the investigation**

NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases  $\ensuremath{\mathsf{NO}}\xspace$  DATA AVAILABLE

#### **Additional information**

NO DATA AVAILABLE

#### 2.1.4 Salmonella in animals

#### A. Salmonella spp. in turkey - breeding flocks and meat production flocks

**Monitoring system** 

Sampling strategy

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

NO DATA AVAILABLE

Meat production flocks

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

**Meat production flocks: At slaughter (flock based approach)** 

NO DATA AVAILABLE

**Case definition** 

NO DATA AVAILABLE

**Monitoring system** 

**Case definition** 

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

Meat production flocks: At slaughter (flock based approach)

NO DATA AVAILABLE

Vaccination policy

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

NO DATA AVAILABLE

**Meat production flocks** 

NO DATA AVAILABLE

Other preventive measures than vaccination in place

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

NO DATA AVAILABLE

**Meat production flocks** 

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

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

NO DATA AVAILABLE

**Meat production flocks** 

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

**Results of the investigation** 

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

**Additional information** 

#### NO DATA AVAILABLE

#### B. Salmonella spp. in geese - breeding flocks and meat production flocks

**Monitoring system** 

Sampling strategy

**Breeding flocks** 

NO DATA AVAILABLE

Type of specimen taken

Imported feed material of animal origin

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

**Meat production flocks: At slaughter (flock based approach)** 

NO DATA AVAILABLE

**Case definition** 

Breeding flocks: Day-old chicks

NO DATA AVAILABLE

**Breeding flocks: Rearing period** 

NO DATA AVAILABLE

**Breeding flocks: Production period** 

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

Meat production flocks: At slaughter (flock based approach)

NO DATA AVAILABLE

**Vaccination policy** 

**Breeding flocks** 

NO DATA AVAILABLE

**Meat production flocks** 

NO DATA AVAILABLE

Other preventive measures than vaccination in place

**Breeding flocks** 

NO DATA AVAILABLE

**Meat production flocks** 

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

**Breeding flocks** 

NO DATA AVAILABLE

Meat production flocks

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

**Breeding flocks** 

NO DATA AVAILABLE

**Meat Production flocks** 

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

**Additional information** 

#### NO DATA AVAILABLE

#### C. Salmonella spp. in ducks - breeding flocks and meat production flocks

**Monitoring system** 

Sampling strategy

**Breeding flocks** 

NO DATA AVAILABLE

Meat production flocks

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

Breeding flocks: Day-old chicks

NO DATA AVAILABLE

**Breeding flocks: Rearing period** 

NO DATA AVAILABLE

**Breeding flocks: Production period** 

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

Meat production flocks: At slaughter (flock based approach)

NO DATA AVAILABLE

**Case definition** 

**Breeding flocks: Day-old chicks** 

NO DATA AVAILABLE

**Breeding flocks: Rearing period** 

NO DATA AVAILABLE

**Breeding flocks: Production period** 

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

**Meat production flocks: At slaughter (flock based approach)** 

NO DATA AVAILABLE

**Vaccination policy** 

**Breeding flocks** 

NO DATA AVAILABLE

**Meat production flocks** 

NO DATA AVAILABLE

Other preventive measures than vaccination in place

**Breeding flocks** 

NO DATA AVAILABLE

**Meat production flocks** 

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

**Breeding flocks** 

NO DATA AVAILABLE

Meat production flocks

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

**Results of the investigation** 

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

NO DATA AVAILABLE

#### D. Salmonella spp. in pigs

**Monitoring system** 

Sampling strategy

**Breeding herds** 

NO DATA AVAILABLE

**Multiplying herds** 

NO DATA AVAILABLE

**Fattening herds** 

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

**Breeding herds** 

NO DATA AVAILABLE

Multiplying herds

NO DATA AVAILABLE

Fattening herds at farm

NO DATA AVAILABLE

Fattening herds at slaughterhouse (herd based approach)

NO DATA AVAILABLE

**Case definition** 

**Breeding herds** 

NO DATA AVAILABLE

**Multiplying herds** 

NO DATA AVAILABLE

Fattening herds at farm

NO DATA AVAILABLE

Fattening herds at slaughterhouse (herd based approach)

NO DATA AVAILABLE

**Vaccination policy** 

**Breeding herds** 

NO DATA AVAILABLE

Multiplying herds

NO DATA AVAILABLE

**Fattening herds** 

NO DATA AVAILABLE

Other preventive measures than vaccination in place

**Breeding herds** 

NO DATA AVAILABLE

**Multiplying herds** 

NO DATA AVAILABLE

**Fattening herds** 

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

**Breeding herds** 

NO DATA AVAILABLE

**Multiplying herds** 

NO DATA AVAILABLE

**Fattening herds** 

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

**Results of the investigation** 

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

#### E. Salmonella spp. in bovine animals

**Monitoring system** 

Sampling strategy

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

Animals at farm

NO DATA AVAILABLE

Animals at slaughter (herd based approach)

NO DATA AVAILABLE

**Case definition** 

Animals at farm

NO DATA AVAILABLE

Animals at slaughter (herd based approach)

NO DATA AVAILABLE

**Vaccination policy** 

NO DATA AVAILABLE

Other preventive measures than vaccination in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

## Table Salmonella in breeding flocks of Gallus gallus

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella spp.	S. Enteritidis	S. Hadar	S. Infantis	S. Typhimuriu m	S. Virchow	Salmonella spp., unspecified
Gallus gallus (fowl) - elite breeding flocks, unspecified - during rearing period	0										
Gallus gallus (fowl) - grandparent breeding flocks for egg production line - day-old chicks	0										
Gallus gallus (fowl) - grandparent breeding flocks for egg production line - during production period	0										
Gallus gallus (fowl) - grandparent breeding flocks for meat production line - day-old chicks	0										
Gallus gallus (fowl) - grandparent breeding flocks for meat production line - during production period	0										
Gallus gallus (fowl) - grandparent breeding flocks for meat production line - during rearing period	0										
Gallus gallus (fowl) - grandparent breeding flocks, unspecified - day-old chicks	0										
Gallus gallus (fowl) - grandparent breeding flocks, unspecified - during production period	0										
Gallus gallus (fowl) - grandparent breeding flocks, unspecified - during rearing period	0										
Gallus gallus (fowl) - parent breeding flocks for egg production line - day-old chicks	0										
Gallus gallus (fowl) - parent breeding flocks for egg production line - during production period - at farm - Control and eradication programmes - official sampling (feaces)	4	CYRPUS'	flock	2	0	0	0	0	0	0	0
Gallus gallus (fowl) - parent breeding flocks for egg production line - during rearing period	0										

## Table Salmonella in breeding flocks of Gallus gallus

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella spp.	S. Enteritidis	S. Hadar	S. Infantis	S. Typhimuriu m	S. Virchow	Salmonella spp., unspecified
Gallus gallus (fowl) - parent breeding flocks for meat production line - during production period - at farm - Control and eradication programmes - official sampling (feaces)	36	CYPRUS'	flock	33	0	0	0	0	0	0	0
Gallus gallus (fowl) - parent breeding flocks for meat production line - during rearing period	0										
Gallus gallus (fowl) - parent breeding flocks, unspecified - day-old chicks	0										
Gallus gallus (fowl) - parent breeding flocks, unspecified - during production period	0										
Gallus gallus (fowl) - parent breeding flocks, unspecified - during rearing period	0										

# Table Salmonella in other poultry

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella spp.	S. Anatum	S. Brandenbur g	S. Enteritidis	S. Typhimuriu m	S. group C1	Salmonella spp., unspecified
Ducks	0										
Ducks - breeding flocks	0										
Ducks - meat production flocks	0										
Gallus gallus (fowl) - broilers	0										
Gallus gallus (fowl) - broilers - day-old chicks	0										
Gallus gallus (fowl) - broilers - during rearing period	0										
Gallus gallus (fowl) - laying hens	0										
Gallus gallus (fowl) - laying hens - day-old chicks	0										
Gallus gallus (fowl) - laying hens - during production period - at farm - Control and eradication programmes - official sampling (feaces)	93	CYPRUS'	flock	40	5	3	1	0	0	1	0
Gallus gallus (fowl) - laying hens - during rearing period	0										
Gallus gallus (fowl) - unspecified	0										
Gallus gallus (fowl) - unspecified - day-old chicks	0										
Gallus gallus (fowl) - unspecified - during production period	0										
Gallus gallus (fowl) - unspecified - during rearing period	0										
Geese	0										
Geese - breeding flocks	0										
Geese - meat production flocks	0										

# Table Salmonella in other poultry

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella spp.	S. Anatum	S. Brandenbur g	S. Enteritidis	S. Typhimuriu m	S. group C1	Salmonella spp., unspecified
Turkeys	0										
Turkeys - breeding flocks	0										
Turkeys - meat production flocks	0										

## Table Salmonella in other birds

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella spp.	S. Enteritidis	S. Typhimuriu m	Salmonella spp., unspecified
Guinea fowl	0						
Ostriches	0						
Partridges	0						
Pheasants	0						
Pigeons	0						
Quails	0						

## **Table Salmonella in other animals**

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella spp.	S. Enteritidis	S. Typhimuriu m	Salmonella spp., unspecified
Cattle (bovine animals)	0						
Cattle (bovine animals) - adult cattle over 2 years	0						
Cattle (bovine animals) - calves (under 1 year)	0						
Goats	0						
Pigs	0						
Pigs - breeding animals	0						
Pigs - fattening pigs	0						
Pigs - unspecified	0						
Sheep	0						
Solipeds, domestic	0						

#### 2.1.5 Antimicrobial resistance in Salmonella isolates

#### A. Antimicrobial resistance in Salmonella in cattle

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

#### NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

## B. Antimicrobial resistance in Salmonella in pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

## Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

#### C. Antimicrobial resistance in Salmonella in poultry

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

**Preventive measures in place** 

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

## Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

#### D. Antimicrobial resistance in Salmonella in foodstuff derived from cattle

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

#### E. Antimicrobial resistance in Salmonella in foodstuff derived from pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

# Relevance of the findings in animals to findings in foodstuffs and to human cases $\ensuremath{\mathsf{NO}}\xspace$ DATA AVAILABLE

#### F. Antimicrobial resistance in Salmonella in foodstuff derived from poultry

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

# Relevance of the findings in animals to findings in foodstuffs and to human cases $\ensuremath{\mathsf{NO}}\xspace$ DATA AVAILABLE

## 2.2 CAMPYLOBACTERIOSIS

## 2.2.1 General evaluation of the national situation

#### A. Thermophilic Campylobacter general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

## 2.2.2 Campylobacteriosis in humans

### A. Thermophilic Campylobacter in humans

#### Reporting system in place for the human cases

YES SINCE JANUARY 2005

#### Case definition

EU RECOMMENDED CASE DEFINITION

#### Diagnostic/analytical methods used

EU RECOMMENDED MICROBIOLOGY LABORATORY RECOMMENDED CRITERIA FOR DIAGNOSIS

#### **Notification system in place**

QUARANTINE(PUBLIC HEALTH) LAW AND REGULATIONS AND THEIR AMENDMENTS. MANDATORY NOTIFIABLE SINCE JANUARY 2005

## History of the disease and/or infection in the country

**NOT APPLICABLE** 

#### Results of the investigation

**NOT APPLICABLE** 

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

**NOT APPLICABLE** 

#### Relevance as zoonotic disease

IT HAS RECENTLY BEEN DECLARED MANDATORY NOTIFIABLE DISEASE AND THEREFORE NO DATA ARE AVAILABLE FOR 2004.

## 2.2.3 Campylobacter in foodstuffs

#### A. Thermophilic Campylobacter in Broiler meat and products thereof

**Monitoring system** 

**Sampling strategy** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Definition of positive finding** 

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

**Preventive measures in place** 

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases  $\ensuremath{\mathsf{NO}}\xspace$  DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

## 2.2.4 Campylobacter in animals

## A. Thermophilic Campylobacter in Gallus gallus

**Monitoring system** 

**Sampling strategy** 

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

Rearing period

NO DATA AVAILABLE

Before slaughter at farm

NO DATA AVAILABLE

At slaughter

NO DATA AVAILABLE

**Case definition** 

Rearing period

NO DATA AVAILABLE

Before slaughter at farm

NO DATA AVAILABLE

At slaughter

NO DATA AVAILABLE

Vaccination policy

NO DATA AVAILABLE

Other preventive measures than vaccination in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

## **Results of the investigation**

NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases  $\ensuremath{\mathsf{NO}}\xspace$  DATA AVAILABLE

#### **Additional information**

NO DATA AVAILABLE

## 2.2.5 Antimicrobial resistance in Campylobacter isolates

## A. Antimicrobial resistance in Campylobacter jejuni and coli in cattle

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

#### NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

#### B. Antimicrobial resistance in Campylobacter jejuni and coli in pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

## Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

#### C. Antimicrobial resistance in Campylobacter jejuni and coli in poultry

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

## Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

#### D. Antimicrobial resistance in Campylobacter jejuni and coli in foodstuff derived from cattle

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

## Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

#### E. Antimicrobial resistance in Campylobacter jejuni and coli in foodstuff derived from pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

**Control program/mechanisms** 

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

## Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

#### F. Antimicrobial resistance in Campylobacter jejuni and coli in foodstuff derived from poultry

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

## Relevance of the findings in animals to findings in foodstuffs and to human cases

NO DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

## 2.3 LISTERIOSIS

## 2.3.1 General evaluation of the national situation

## A. Listeriosis general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

#### 2.3.2 Listeriosis in humans

#### A. Listeriosis in humans

#### Reporting system in place for the human cases

YES, SINCE JANUARY 2005

#### **Case definition**

EU RECOMMENDED CASE DEFINITION

#### Diagnostic/analytical methods used

EU RECOMMENDED MICOBIOLOGY LABORATORY CRITERIA

#### **Notification system in place**

QUARANTINE (PUBLIC HEALTH) LAW AND REGULATIONS AND THEIR AMENDMENTS. MANDATORY NOTIFIABLE SINCE JANUARY 2005

#### History of the disease and/or infection in the country

**NOT APPLICABLE** 

#### Results of the investigation

**NOT APPLICABLE** 

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

NOT APPLICABLE

#### Relevance as zoonotic disease

IT HAS RECENTLY BEEN DECLARED AS A MANDATORY NOTIFIABLE DISEASE AND THEREFORE NO DATA ARE AVAILABLE FOR 2004.

## 2.4 E. COLI INFECTIONS

## 2.4.1 General evaluation of the national situation

## A. Verotoxigenic Escherichia coli infections general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

#### 2.4.2 E. coli infections in humans

#### A. Verotoxigenic Escherichia coli infections in humans

#### Reporting system in place for the human cases

YES, SINCE JANUARY 2005 FOLLOWING AMENDMENT OF THE LEGISLATION

#### Case definition

EU RECOMMENDED CASE DEFINITION

#### Diagnostic/analytical methods used

EU RECOMMENDED MICROBIOLOGY LABORATORY DIAGNOSIS

#### **Notification system in place**

QUARANTINE (PUBLIC HEALTH)LAW AND REGULATIONS AND THEIR AMENDMENTS.NOTIFIABLE SINCE JANUARY 2005

#### History of the disease and/or infection in the country

**NOT APPLICABLE** 

#### Results of the investigation

**NOT APPLICABLE** 

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

NOT APPLICABLE

#### Relevance as zoonotic disease

IT HAS RECENTLY BEEN DECLARED AS A MANDATORY NOTIFIABLE DISEASE THEREFORE NO DATA ARE AVAILABLE FOR 2004.

## 2.4.3 Escherichia coli, pathogenic in animals

#### A. Verotoxigenic Escherichia coli in cattle (bovine animals)

Monitoring system Sampling strategy

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

Animals at farm

NO DATA AVAILABLE

Animals at slaughter (herd based approach)

NO DATA AVAILABLE

**Case definition** 

Animals at farm

NO DATA AVAILABLE

Animals at slaughter (herd based approach)

NO DATA AVAILABLE

**Vaccination policy** 

NO DATA AVAILABLE

Other preventive measures than vaccination in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

NO DATA AVAILABLE

Results of the investigation

# NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

# 2.5 TUBERCULOSIS, MYCOBACTERIAL DISEASES

### 2.5.1 General evaluation of the national situation

# A. Tuberculosis general evaluation

### History of the disease and/or infection in the country

Tuberculin test campaigns have been applied since 1970 on all bovines over the age of six months. No case of TB has been found in Cyprus since 1970. The 1975 campaign was assisted by FAO's epizootiologist Dr. Petar Markovic. Since 1986 tuberculin test had been applied only on bovines over the age of 24 months. Records indicate that tests on herd level were performed during the following periods: 1982-83, 1986-87-88, 1994-95, and 2000-2001. The records prove that the animals which have initially reacted positively or inconclusively to the tuberculin test were retested according to Directive 64/432/EEC provisions and all proved to be negative. Animals to enter the herds did not require testing for tuberculosis as these animals were originating from herds located in the territory of Cyprus in which the Government of Cyprus excercises effective control; thus regularly tested for TB. All slaughtered animals and their carcasses are necrotomicaly checked, prior been given to the meat industry for human consumption, for possible presence of TB lesions. An island wide tuberculin test campaign began in 2004 according to Directive 64/432/EECprovisions. In 2004, 6937 animals were tested from 82 holdings of which none gave positive reaction. Two animals which reacted to the single intradermal test, had finally proved to be negative after the conduction of the intradermal comparative test. In 2005, 38779 animals were tested from 215 holdings. 122 holdings were assigned the Officially Free Status. In 2005 none animal has reacted positively to the single intradermal testing.

In 2006, 110 holdings retained the Bovine Tuberculosis Officially Free Status (BTBOFS) and 38 holdings have been assigned the BTBOFS. The target number of holdings was 326.

One animal has reacted inconclusively to the single intradermal testing. This animal was led to the slaughterhouse and pathological material for the confirmation of M. bovis was taken from lymphnodes (retropharyngeal, mediastinal and mesenteric lymph nodes) and from parenchymatous organs (lungs, liver, spleen). The animal did not present any pathological lesions during post-mortem examination and all the samples were examined microbiologically (examination of stained smears and cultivation). None sample gave a positive result.

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

In 2008, 126 holdings retained the Bovine Tuberculosis Officially Free Status (BTBOFS) and 33 holdings have been assigned the BTBOFS. The target number of holdings was 322.

### Recent actions taken to control the zoonoses

The national tuberculin test campaign which had begun in August 2004 according to Directive 64/432/EEC provisions continues. This program aims to examine all bovines over the age of six weeks and to assign to all the herds the Officially Free Status.

# 2.5.2 Tuberculosis, mycobacterial diseases in humans

# A. Tuberculosis due to Mycobacterium bovis in humans

# Reporting system in place for the human cases

YES, SINCE 1932

#### **Case definition**

EU RECOMMENDED CASE DEFINITION

# Diagnostic/analytical methods used

EU RECOMMENDED MICROBIOLOGY LABORATORY DIAGNOSTIC CRITERIA

# Notification system in place

QUARANTINE (PUBLIC HEALTH) LAW AND REGULATIONS AND THEIR AMENDMENTS.

# History of the disease and/or infection in the country

BOVINE TB HASN'T BEEN A PROBLEM FOR HUMANS IN CYPRUS.

#### Relevance as zoonotic disease

THOUGH BOVINE TUBERCULOSIS IS NOT A PROBLEM IN HUMANS IN CYPRUS, WE RECOGNISE THE NEED FOR CONTINUOUS COLLABORATION IN THE AREA WITH THE VETERINARY SERVICES AS WELL AS ACTIVE SURVEILLANCE

# 2.5.3 Mycobacterium in animals

# A. Mycobacterium bovis in bovine animals

# Status as officially free of bovine tuberculosis during the reporting year The entire country free

In 2008, 126 holdings retained the Bovine Tuberculosis Officially Free Status (BTBOFS) and 33 holdings were assigned the TBOFS. The target number of holdings was 322.

### Free regions

Almost all the bovine herds in the districts of Lemesos, Ammochostos and Paphos are Tuberculosis Officially Free.

### **Monitoring system**

### **Sampling strategy**

All animals above the age of six weeks are tested for TB. In order for a holding to be assigned the BTBOFS its animals must undergo two consecutive tuberculin tests within a minimum of a six month time interval. The holding retains its TBOFS if all its animals above six weeks of age are subjected to tuberculin testing every year.

#### Frequency of the sampling

Bovines above six weeks of age must undergo two consecutive tuberculin tests within a minimum period of a six month time interval. A holding retains its TBOFS if all its animals are subjected to tuberculin test every year.

#### Type of specimen taken

Other: Tuberculosis skin reaction

#### **Methods of sampling (description of sampling techniques)**

As described in Annex A of the EU Directive 64/432/EEC

#### **Case definition**

If an animal yields a positive reaction to the single intradermal test (Bovine tuberculin) it is further examined with the comparative intradermal test (Bovine and Avian tuberculin). If it yields a positive reaction to the second test it is considered positive; the animal is slaughtered, necrotomically examined for tuberculosis' lesions and samples are taken for laboratory in order to detect M. bovis in the case of positive necrotomical findings.

#### Diagnostic/analytical methods used

- 1) Single and comparative Tuberculin skin tests (Bovine and Avian tuberculin)
- 2) Post-mortem examination.
- 3) Microbiological examination.

# **Vaccination policy**

No vaccination is allowed.

Following the completion of the first tuberculin test no animal over six weeks old is allowed to enter the herd, unless it reacts negatively to an intradermal tuberculin test carried out either 30 days prior to the movement or 30 days after its introduction into the herd.

# Other preventive measures than vaccination in place

Following the completion of the first tuberculin test no animal over six weeks old is allowed to enter the herd, unless it reacts negatively to an intradermal tuberculin test carried out either 30 days prior to the movement or 30 days after its introduction into the herd.

### **Control program/mechanisms**

# The control program/strategies in place

The control program aims to examine all bovines over the age of six weeks according to the provisions of Directive 64/432/EEC. The main objective of the program is to assign to bovine herds the Bovine Tuberculosis Officially Free Status (BTBOFS).

#### Recent actions taken to control the zoonoses

Testing, monitoring and surveillance.

# Measures in case of the positive findings or single cases

The animal is slaughtered and samples are taken for the laboratory (microbiological) isolation of M. bovis. Movement restrictions are imposed on the herd and the milk must be pasteurized.

If the presence of tuberculosis is not confirmed laboratorily, the already applied movement restrictions are lifted following a negative test applied on all animals over six weeks of age.

The test is conducted at least 42 days after the removal of the reactors animals. On the other hand if tuberculosis is laboratorily confirmed, movement restrictions are lifted when cleansing and disinfection of the premises and utensils has been completed and all animals over six weeks of age have reacted negatively to at least two consecutive tuberculin tests. The first one conducted not less than 60 days and the second not less than four months and no more than 12 after the removal of the last positive animal.

#### **Notification system in place**

It has always been a notifiable in Cyprus and any occurrence of the disease is obligatory notifiable to the Veterinary Services by law. No case has been reported since 1928

#### **Results of the investigation**

In 2008, 126 holdings retained the Bovine Tuberculosis Officially Free Status (BTBOFS) and 33 holdings have been assigned the BTBOFS. The target number of holdings was 322.

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

None animal reacted positively in 2008.

# B. Mycobacterium bovis in farmed deer

### **Monitoring system**

# Sampling strategy

Not applied as no farm deer exist in Cyrpus

## Frequency of the sampling

Not applied

### **Methods of sampling (description of sampling techniques)**

Not applied

#### **Case definition**

Not applied

#### Diagnostic/analytical methods used

Not applied

## **Vaccination policy**

Not applied

### Other preventive measures than vaccination in place

Not applied

# **Control program/mechanisms**

## The control program/strategies in place

Not applied

## Recent actions taken to control the zoonoses

Not applied

## Suggestions to the Community for the actions to be taken

Not applied

## Measures in case of the positive findings or single cases

Not applied

# Notification system in place

Not applied

# **Results of the investigation**

Not applied

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

Not applied

## Relevance of the findings in animals to findings in foodstuffs and to human cases

Not applied

#### **Additional information**

Not applied

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

	Total number of existing bovine		Officially free herds		Infected herds		Routine tube	rculin testing	Number of tuberculin tests carried out before the	Number of animals with suspicious lesions of	Number of animals
Region	Herds	Animals	Number of herds	%	Number of herds	Interval between routine tuberculin tests		introduction into the herds (Annex A(I)(2)(c) third indent (1) of Directive 64/432/EEC)	tuberculosis examined and submitted to histopathologic al and bacteriological examinations	detected positive in bacteriological examination	
KYPROS / KIBRIS	343	55620	159	46.36	0	0	0	30753		0	0
Total	343	55620	159	46.36	0	0.0	0	30753	0	0	0
Total - 1											

# 2.6 BRUCELLOSIS

# 2.6.1 General evaluation of the national situation

# A. Brucellosis general evaluation

# History of the disease and/or infection in the country

The causative agent of brucellosis in Cyprus at both bovine and sheep / goats is Brucella melitensis. Brucellosis caused by Brucella abortus has never been diagnosed in Cyprus (with the exception of the period 1921 to 1932, when it was imported in the island by cattle that were brought from the U.K.). As of 2001 a brucellosis eradication programme is applied on the area controlled by the Veterinary Services of the Republic of Cyprus.

Evolution of Brucellosis in Cyprus:

1930 to 1932

Brucellosis was found in goats imported from Malta (no spread)

1964

One outbreak in a bovine herd

1970 to 1973

Sporadic outbreaks

1973 to 1985

National Eradication program against Brucellosis

Successful test and slaughter eradication campaign

1985 1997

No outbreaks of the disease

1997 to 2000

Reappearance of the disease

2001

Beginning of Brucellosis Eradication and Elimination Project

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

According to the epidemiological data, from 2000 until the end of 2008, the prevalence and incidence of bovine, as well as, ovine and caprine brucellosis in Cyprus have decreased dramatically.

Possible sources of infection in a herd or a flock are:

 $\hat{A}$  the neighboring with known infected farms (most common)

· common use of machines

· illegal movements of animals from known infected farms

· sharing of pasture

· mechanical vectors (e.g. lorries of traders)

# Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases

There were no human cases of brucellosis during 2008.

## Recent actions taken to control the zoonoses

On the area controlled by the Veterinary Services of the Republic of Cyprus from 2001 is applied the brucellosis eradication programme.

# 2.6.2 Brucellosis in humans

### A. Brucellosis in humans

## Reporting system in place for the human cases

YES, SINCE 1983

#### Case definition

EU RECOMMENDED CASE DEFINITION SINCE JANUARY 2004

## Diagnostic/analytical methods used

EU RECOMMENDED MICROBIOLOGY LABORATORY DIAGNOSTIC CRITERIA SINCE JANUARY 2004

## **Notification system in place**

QUARANTINE(PUBLIC HEALTH) LAW AND REGULATIONS AND AMENDMENTS. MANDATORY NOTIFIABLE.

# History of the disease and/or infection in the country

SPORADIC CASES OF BRUCELLOSIS WERE REPORTED OVER THE YEARS. THE ONLY CASE IN 2004 WAS OCCUPATION RELATED

#### Relevance as zoonotic disease

SPORADIC CASES OF BRUCELLOSIS WERE REPORTED OVER THE YEARS. THERE IS A CONTINUOUS COLLABORATION WITH THE VETERINARY SERVICES, AS ON THE AREA CONTROLLED BY THE VETERINARY SERVICES OF THE REPUBLIC OF CYPRUS. A BRUCELLOSIS ERADICATION PROGRAMME IS IN PLACE AS OF 2001. CLINICIANS ARE ALERTED ABOUT THE POSSIBILITY OF DIAGNOSIS AND A SYSTEM FOR SURVEILLANCE IS IN PLACE

# 2.6.3 Brucella in animals

# A. Brucella abortus in bovine animals

Status as officially free of bovine brucellosis during the reporting year Free regions

**Monitoring system** Frequency of the sampling

**Vaccination policy** 

# B. Brucella melitensis in goats

Monitoring system

Type of specimen taken

Other:

**Vaccination policy** 

Vaccination is prohibited

# **C. B.** melitensis in animal - Cattle (bovine animals)

## **Monitoring system**

# Sampling strategy

At infected and suspected herds sampling is targeted.

Concerning the other herds; sampling is part of a permanent monitoring scheme. Samples are collected at farm level, by the employees of the Veterinary Services.

# Frequency of the sampling

Infected farms: Monthly blood sampling of all animals over 12 months. Cultures from milk samples from the seropositive animals in new outbreaks and from fetuses (in any case of abortion)

Non infected farms: Cultures from milk samples and fetuses from aborting animals. Bulk milk samples every 3 months from all herds having more than 10 dairy cows. Blood sampling of all animals over 12 months old once a year in non officially free herds. Farms with less than 10 individuals over 12 months old: Blood sampling of all animals over 12 months old twice a year in non officially free herds. For officially free herds blood sampling of all animals over 12 months old once a year.

## Type of specimen taken

Other: Blood, Milk, Fetuses

#### **Methods of sampling (description of sampling techniques)**

Blood samples are taken by venipuncture from the caudal vein. Blood is collected in tubes (4 ml). Milk is collected in screw cup bottles (30 ml). Samples are stored at 2-40C, for one week at the most for blood samples and 2-3 days for milk samples.

#### **Case definition**

As a positive case is defined a case when an animal reacts positively at Rose Bengal test and CFT test (> 20 ICFTU).

#### Diagnostic/analytical methods used

All materials, reagents and procedures used are based to the relevant EEC legislation (Dir 91/68/EEC and 64/432/EEC) and the OIE Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees) 5th ed, 2004.

Bulk milk ELISA: Commercially available kits are used that fulfill the requirements of the references mentioned above. The procedures used are according to the manufacturers directions.

Rose Bengal test:  $30 \,\hat{l}^{1}/4l$  of serum and antigen are mixed on tiles to produce a zone of appr 2 cm. The mixture is rocked using a rotating shaker for 4 min and

then observed for agglutination. Any degree of agglutination is considered positive. In each day test a positive and a negative control is used. The Rose Bengal antigen is commercially purchased and is manufactured according to the specifications given in the above mentioned references.

Complement fixation test: Dilution of serum starts from  $\hat{A}^{1/4}$  until 1/256, sera are inactivated in water bath in tubes and then transferred to 96 well U micro plates. Warm fixation follows. All reagents are commercially purchased and each time the batch or the company changes titration of the reagents takes place. In each day test controls of complement, antigen, blood as well as positive and negative controls are used. Also, for each sample examined there is anticomplimentary control.

Isolation: On Brucella medium incubating in 37oC with and without CO2. Confirmation on the species level: Dye of the colony with Gram and Stamp. Culture on Mc Conkey agar (lactose fermentation) and Blood agar (Haemolysis).

# **Vaccination policy**

**VACCINATION IS PROHIBITED** 

## Other preventive measures than vaccination in place

All movements of animals should be reported and registered on a central database and are allowed only after a brucellosis negative serological examination.

### **Control program/mechanisms**

### The control program/strategies in place

The bovine brucellosis eradication program is based on a test and extended slaughter or killing of positive animals or positive herds, implemented in the areas of Cyprus which can be controlled by the Government of Cyprus and in which respectively the Veterinary Services exercise their effective control. The target population of the program is all bovine animals over 12 months old. The Veterinary Services, which belong to the Ministry of Agriculture, Environment and Natural Resources, is responsible for the application of the bovine brucellosis eradication program. The Director of the Veterinary Services is responsible for coordinating the whole program. In 2004, 2005, 2006, 2007 and 2008 the EU has co-financed 50% of the program cost. All the measures taken are according to Directive 64/432/EEC.

#### Recent actions taken to control the zoonoses

Application of brucellosis eradication program.

## Measures in case of the positive findings or single cases

Once there is a confirmation of a positive case:

- a. The farm is placed under movement restrictions.
- b. The milk collecting Organizations are notified so as the milk originating from the infected farms to be collected in separate milk tanks for pasteurization.
- c. Seropositive bovines are isolated from the other animals to be slaughtered in the designated slaughterhouse. In case there is stamping out decision restocking is permitted after 6 months.
- d. Seropositive animals are valued before slaughter. Compensations at a level of 100% of their reproductive value are paid to owners.
- e. Dogs and animals of other species which are known to be susceptible to brucellosis are serologically examined too.
- f. One month after the slaughter, all bovine animals over twelve months old are serologically reexamined.
- g. Serological reexamination of the confirmed positive herds is performed every month, and the seropositive bovines are culled.
- h. Farms' cleaning and disinfection is done under the supervision of the Veterinary Services, with disinfectants being provided on a free basis by the Veterinary Services.
- i. The pasture after being collected and disinfected is buried in a place far away from the establishments.

# **Notification system in place**

Any case of abortion or other symptoms related to brucellosis are compulsory notifiable to Veterinary Services of the Republic of Cyprus, according to the animal health laws N. 109 (I)/2001 and N. 82(I)/2003, 116(I)/2007 and 20(I)/2009.

## Results of the investigation

Link to tables

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

The progress of eradication program was very satisfactory, with both the prevalence and incidence of bovine brucellosis in Cyprus reached zero levels by the end of 2008.

# Relevance of the findings in animals to findings in foodstuffs and to human cases

There were no human cases of brucellosis during 2008.

# **Additional information**

As far as it concerns the declaration of officially free herds 288 out of 320 have been declared officially free. The rest are under the procedure of granting the status.

# D. B. melitensis in animal - Sheep and goats

## **Monitoring system**

# Sampling strategy

At infected and suspected flocks sampling is targeted.

Concerning the other flocks; sampling is part of a permanent monitoring scheme.

Samples are collected at farm level, by the employees of the Veterinary Services.

# Frequency of the sampling

Infected farms: Monthly blood sampling of all animals over 6 months. Cultures from milk samples from the seropositive animals in new outbreaks and fetuses (in any case of abortion).

Non infected farms: Cultures from milk samples and fetuses from aborting animals. Blood sampling of all animals over 6 months old twice a year in non officially free farms. For officially free farms blood sampling of all animals over 6 months old or of an appropriate percentage of them once a year.

### Type of specimen taken

Other: Blood, Milk, Fetuses

# Methods of sampling (description of sampling techniques)

Blood samples are taken by venipuncture from the jugular vein. Blood is collected in tubes (4 ml). Milk is collected in screw cup bottles (30 ml). Samples are stored at 2-40C, for one week at the most for blood samples and 2-3 days for milk samples.

### **Case definition**

As a positive case is defined a case when an animal reacts positively at Rose Bengal test and / or CFT test (> 20 ICFTU).

#### Diagnostic/analytical methods used

All materials, reagents and procedures used are based to the relevant EEC legislation (Dir 91/68/EEC and 64/432/EEC) and the OIE Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees) 5th ed, 2004.

Individual Screening Test: Rose Bengal test. 30 νl of serum and antigen are mixed on tiles to produce a zone of appr 2 cm. The mixture is rocked using a rotating shaker for 4 min and then observed for agglutination. Any degree of agglutination is considered positive. In each day test a positive and a negative control is used. The Rose Bengal antigen is commercially purchased and is manufactured according to the specifications given in the above mentioned references.

Individual Confirmation Test: Complement fixation test. Dilution of serum from

¼ until 1/256 is used, sera are inactivated in water bath in tubes and then transferred to 96 well U micro plates. Warm fixation follows. All reagents are commercially purchased and each time the batch or the company changes titration of the reagents takes place. In each day test controls of complement, antigen, blood as well as positive and negative controls are used. Also, for each sample examined there is anticomplimentary control.

Isolation: On Brucella medium incubating in 37 C with and without CO2. Confirmation on the species level: Dye of the colony with Gram and Stamp. Culture on Mc Conkey agar (lactose fermentation) and Blood agar (Haemolysis).

# **Vaccination policy**

#### **VACCINATION IS PROHIBITED**

### Other preventive measures than vaccination in place

All movements of animals should be reported and registered on a central database and are allowed only after a brucellosis negative serological examination.

### **Control program/mechanisms**

#### The control program/strategies in place

The ovine and caprine brucellosis eradication program is based on a test and extended slaughter or killing of positive animals or positive flocks, implemented in the area controlled by the Veterinary Services of the Republic of Cyprus. The target population of the program is all animals over 6 months old. The Department of Veterinary Services, which belongs to the Ministry of Agriculture, Environment and Natural Resources, is responsible for the application of the ovine and caprine brucellosis eradication program. The Director of the Veterinary Services is responsible for the coordination of the whole program. In 2004, 2005 and 2006,2007 and 2008 the EU has co-financed 50% of the program cost. All the measures taken are according to Directive 91/68 EEC.

## Recent actions taken to control the zoonoses

Application of brucellosis eradication program.

# Measures in case of the positive findings or single cases

Once there is a confirmation of a positive case:

- a. The farm is placed under movement restrictions.
- b. The milk collecting Organizations are notified so as the milk originating from the infected farms to be collected in separate milk tanks for pasteurization.
- c. Seropositive sheep and goats are isolated from the other animals to be slaughtered in the designated slaughterhouse. In case there is stamping out decision restocking is permitted after 6 months.
- d. Seropositive animals are valued before slaughter. Compensations at a level of 100% of their reproductive value are paid to owners.

- e. Dogs and animals of other species which are known to be susceptible to brucellosis are serologically examined too.
- f. One month after the slaughter, all sheep and goats over six months old are serologically reexamined.
- g. Serological reexamination of the confirmed positive flocks is performed every month, and the seropositive animals are culled.
- h. Farms' cleaning and disinfection is done under the supervision of the Veterinary Services, with disinfectants being provided on a free basis by the Veterinary Services.
- i. The pasture after being collected and disinfected is buried in a place far away from the establishments.

## **Notification system in place**

Any case of abortion or other symptoms related to brucellosis are compulsory notifiable to Veterinary Services of the Republic of Cyprus, according to the Animal Health Laws N. 109 (I)/2001, N. 82(I)/2003, 116(I)/2007 and 20(I)/2009.

# Results of the investigation

Link to relevant tables

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

Both the prevalence and incidence of ovine and caprine brucellosis decreased further and remained at very low levels in 2008.

## Relevance of the findings in animals to findings in foodstuffs and to human cases

There were no human cases of brucellosis during 2008.

#### **Additional information**

As far as it concerns the declaration of officially free herds 2,348 out of 3,341 have been declared officially free. The rest are under the procedure of granting the status.

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

						Number of		Indicators			
Region	Total number of herds	Total number of herds under the programme	Number of	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd Incidence	
KYPROS / KIBRIS	343	320	284	1	1	0	0	88.75	.35	.35	
Total	343	320	284	1	1	0	0.0	88.75	0.35	0.35	
Total - 1	353	330	289	0	0	0	0	87.58	0	0	

# Table Bovine brucellosis - data on animals - Community co-financed eradication programmes

		Number of				Slaugh	ntering	Indicators		
Region	Total number of animals	animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	Number of animals with positive result slaughtered or	Total number of animals slaughtered	% coverage at animal level	% positive animals - animal prevalence	
KYPROS / KIBRIS	55620	38494	35038	9255	1	1	1	91.02	0	
Total	55620	38494	35038	9255	1	1	1	91.02	0.0	
Total - 1	57568	38950	31939	5755	0	0	1	82	0	

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

		Status of herds and animals under the programme												
	Total number of herds and animals under the		Unknown			Not free or no	t officially free		Free or officially free		Free		Officially from	
		amme	Unki	iown	Last check positive		Last chec	Last check positive sus		ended	Free		Officially free	
Region	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
KYPROS / KIBRIS	320	38494	0	0	0	0	32	5299	0	0	0	0	288	33195
Total	320	38494	0	0	0	0	32	5299	0	0	0	0	288	33195
Total - 1	330	38950	0	0	0	0	76	6969	0	0	0	0	254	31981

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

						Number of		Indicators			
Region	Total number of herds	Total number of herds under the programme	Number of	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herd coverage	% positive herds Period herd prevalence .14 0.14	% new positive herds Herd Incidence	
KYPROS / KIBRIS	3482	3341	2803	4	1	0	0	83.9	.14	.04	
Total	3482	3341	2803	4	1	0	0.0	83.9	0.14	0.04	
Total - 1	3583	3439	2946	3	3	0	0	85.66	.1	.1	

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

			Number of animals tested			Slaugh	ntering	Indicators		
	Total number of animals			Number of animals tested individually	Number of positive animals	Number of animals with positive result	Total number of animals	% coverage at animal level	% positive animals - animal prevalence	
Region		programme				slaughtered or	slaughtered	animai ievei		
KYPROS / KIBRIS	562759	485555	222856	222856	1	1	28	45.9	0	
Total	562759	485555	222856	222856	1	1	28	45.9	0.0	
Total - 1	620106	570829	243700	243700	3	3	30	42.69	0	

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

		Status of herds and animals under the programme													
	Total number of herds and animals under the programme		Unknown			Not free or not	t officially free		Free or off	ficially free	-	ee	Officia	lhi fra a	
					Last check positive		Last chec	k positive	suspe	ended	Fr	ee	Officia	lly free	
Region	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	
KYPROS / KIBRIS	3341	485555	0	0	0	0	988	148581	5	1097	0	0	2348	335877	
Total	3341	485555	0	0	0	0	988	148581	5	1097	0	0	2348	335877	
Total - 1	3439	570829	0	0	0	0	1134	204817	5	1073	0	0	2300	364939	

# 2.7 YERSINIOSIS

# 2.7.1 General evaluation of the national situation

# A. Yersinia enterocolitica general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

# 2.7.2 Yersiniosis in humans

### A. Yersinosis in humans

## Reporting system in place for the human cases

YES SINCE JANUARY 2005

#### **Case definition**

EU RECOMMENDED CASE DEFINITION

# Diagnostic/analytical methods used

EU RECOMMENDED LABORATORY CRITERIA FOR DIAGNOSIS

# **Notification system in place**

QUARANTINE(PUBLIC HEALTH) LAW AND REGULATIONS AND THEIR AMENDMENTS. NOTIFIABLE SINCE JANUARY 2005

# History of the disease and/or infection in the country

**NOT APPLICABLE** 

## Results of the investigation

**NOT APPLICABLE** 

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

**NOT APPLICABLE** 

#### Relevance as zoonotic disease

AS IT HAS RECENTLY BEEN DECLARED AS MANDATORY NOTIFIABLE DISEASE THEREFORE NO DATA ARE AVAILABLE FOR 2004. WE CONSIDER IT A RELEVANT AS ZOONOTIC DISEASE.

# 2.7.3 Yersinia in animals

# A. Yersinia enterocolitica in pigs

Monitoring system Sampling strategy Animals at farm

NO DATA AVAILABLE

Animals at slaughter (herd based approach)

NO DATA AVAILABLE

**Methods of sampling (description of sampling techniques)** 

Animals at farm

NO DATA AVAILABLE

Animals at slaughter (herd based approach)

NO DATA AVAILABLE

**Case definition** 

Animals at farm

NO DATA AVAILABLE

Animals at slaughter (herd based approach)

NO DATA AVAILABLE

**Vaccination policy** 

NO DATA AVAILABLE

Other preventive measures than vaccination in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

**Notification system in place** 

## NO DATA AVAILABLE

# Results of the investigation

NO DATA AVAILABLE

National evaluation of the recent situation, the trends and sources of infection  ${\tt NO\ DATA\ AVAILABLE}$ 

Relevance of the findings in animals to findings in foodstuffs and to human cases  $\ensuremath{\mathsf{NO}}\xspace$  DATA AVAILABLE

## **Additional information**

NO DATA AVAILABLE

# 2.8 TRICHINELLOSIS

- 2.8.1 General evaluation of the national situation
- 2.8.2 Trichinellosis in humans
- 2.8.3 Trichinella in animals

# 2.9 ECHINOCOCCOSIS

## 2.9.1 General evaluation of the national situation

# A. Echinococcus spp. general evaluation

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

During 2008 the control of Echinococcosis/Hydatidosis scheme has continued. Within this scheme, 20 dogs, were preventively treated with Pranziquantel.

111060 ovines, 171300 caprines, 11687 bovines and 572456 swines had been slaughtered in 2007 of which 3 ovines, 1 caprine and bovine have been found to be infected with E. granulosus cysts.

### Recent actions taken to control the zoonoses

During 2008, 10637 Pranziquantel baits were spread covering the buffer zone and other areas, where movement of stray dogs was reported.

# 2.9.2 Echinococcosis in humans

# A. Echinococcus spp. in humans

# Reporting system in place for the human cases

YES

## **Case definition**

EU RECOMMENDED CASE DEFINITION

## Diagnostic/analytical methods used

EU RECOMMENDED LABORATORY CRITERIA FOR DIAGNOSIS

# Notification system in place

QUARANTINE(PUBLIC HEALTH) LAW AND REGULATIONS AND AMENDMENTS. IT IS A NOTIFIABLE DISEASE.

## Relevance as zoonotic disease

SPORADIC CASES OF ECHINOCOCCUS ARE REPORTED YEARLY. SURVEILLANCE OF HUMAN CASES IS CONSIDERED IMPORTANT TO EVALUTE THE PREVENTIVE PROGRAMS IN ANIMALS

# 2.10 TOXOPLASMOSIS

# 2.10.1 General evaluation of the national situation

# A. Toxoplasmosis general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

Cyprus - 2008

# 2.10.2 Toxoplasmosis in humans

# A. Toxoplasmosis in humans

## Reporting system in place for the human cases

YES, SINCE JANUARY 2005 FOLLOWING AMENDMENT OF THE LEGISLATION

#### Case definition

EU RECOMMENDED CASE DEFINITION

# Diagnostic/analytical methods used

EU RECOMMENDED LABORATORY CRITERIA FOR DIAGNOSIS OF TOXOPLASMOSIS

# Notification system in place

QUARANTINE (PUBLIC HEALTH) LAW AND REGULATIONS AND THEIR AMENDMENTS. NOTIFIABLE SINCE JANUARY 2005

## History of the disease and/or infection in the country

**NOT APPLICABLE** 

### Results of the investigation

**NOT APPLICABLE** 

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

**NOT APPLICABLE** 

#### Relevance as zoonotic disease

NO DATA ARE AVAILABLE AS IT HAS RECENTLY BEEN INCLUDED IN THE LIST OF MANDATORY NOTIFIABLE DISEASES. WE CONSIDER THE DISEASE AS RELEVANT IN VIEW OF CONGENITAL TOXOPLASMOSIS

# **2.11 RABIES**

# 2.11.1 General evaluation of the national situation

# A. Rabies general evaluation

# History of the disease and/or infection in the country

Cyprus is free from Rabies

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

Cyprus is free from Rabies

#### Recent actions taken to control the zoonoses

Concerning the animals' entry into Cyprus either on a non commercial movement or on a commercial movement it is required that are duly vaccinated against Rabies.

The time period prior in which the vaccination should have taken place depends on the country of origin as provided by the EU Regulation 998/2003/EK and the related EU Decisions.

Animals originating from EU countries and third countries which are considered of equal to the EU member states Rabies status (mentioned in Part B, section 2 and Part C of Annex II of Regulation 998/2003/EK) are required to be vaccinated/revaccinated against Rabies at least 30 days prior departrure for Cyprus.

Animals originating from third countries not mentioned in Part B, section 2 and Part C of Annex II are required to have a titer result of at least 0.5 IU/ml of Rabies Neutralising Antibodies (RNA) prior the animal departs for Cyprus.

The blood sampling should have taken place 30 days after Rabies vaccination/revaccination has taken place but not less than 90 days prior departure for Cyprus.

Animals originating from Cyrpus and the other EU countries, taken on a trip to one of the third countries not mentioned in Part B, section 2 and Part C of Annex II of Regulation 998/2003/EK, and which will return to Cyprus are required to have a positive RNA blood titration test result prior leaving either Cyprus or the EU member for the trip to the third country.

Animals originating from Cyprus traveling to an EU country should be duly vaccinated or revaccinated against Rabies in order to reenter Cyprus.

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#### 2.11.2 Rabies in humans

#### A. Rabies in humans

#### Reporting system in place for the human cases

YES.

#### **Case definition**

EU RECOMMENDED CASE DEFINITION SINCE JANUARY 2004

#### Diagnostic/analytical methods used

EU RECOMMENDED MICOBIOLOGY LABORATORY CRITERIA

#### Notification system in place

QUARANTINE(PUBLIC HEALTH) LAW AND REGULATIONS AND AMENDMENTS. MANDATORY NOTIFIABLE DISEASE AND CASE DEFINITIONS INTRODUCED SINCE JANUARY 2004

#### History of the disease and/or infection in the country

NO CASES OF RABIES HAVE BEEN REPORTED OVER THE LAST 30 YEARS AND CYPRUS IS A RABIES FREE COUNTRY

## 2.11.3 Lyssavirus (rabies) in animals

#### A. Rabies in dogs

## **Monitoring system**

#### Sampling strategy

Cyprus is free from Rabies.

Concerning the animals' entry into Cyprus either on a non commercial movement or on a commercial movement it is required that are duly vaccinated against Rabies.

The time period prior in which the vaccination should have taken place depends on the country of origin as provided by the EU Regulation 998/2003/EK and the related EU Decisions.

Animals originating from EU countries and third countries which are considered of equal to the EU member states Rabies status (mentioned in Part B, section 2 and Part C of Annex II of Regulation 998/2003/EK) are required to be vaccinated/revaccinated against Rabies at least 30 days prior departrure for Cyprus.

Animals originating from third countries not mentioned in Part B, section 2 and Part C of Annex II are required to have a titer result of at least 0.5 IU/ml of Rabies Neutralising Antibodies (RNA) prior the animal departs for Cyprus.

The blood sampling should have taken place 30 days after Rabies vaccination/revaccination has taken place but not less than 90 days prior departure for Cyprus.

Animals originating from Cyrpus and the other EU countries, taken on a trip to one of the third countries not mentioned in Part B, section 2 and Part C of Annex II of Regulation 998/2003/EK, and which will return to Cyprus are required to have a positive RNA blood titration test result prior leaving either Cyprus or the EU member for the trip to the third country.

Animals originating from Cyprus traveling to an EU country should be duly vaccinated or revaccinated against Rabies in order to reenter Cyprus.

#### Frequency of the sampling

Blood Sampling is done for dogs which are to travel to a third country not mentioned in Part B, section 2 and Part C of Annex II of Regulation 998/2003/EK and which will enter/return back to Cyprus.

#### Type of specimen taken

#### Blood

#### **Methods of sampling (description of sampling techniques)**

Blood is sampled and the blood sampling should have taken place 30 days after Rabies vaccination/revaccination has taken place but not less than 90 days prior departure for Cyprus. The blood sample should be sent to one of the EU recognised laboratories for evaluating the Rabies Neutralising Antibodies titer.

#### **Case definition**

As Rabies case is considered an animal which shows symptoms attributed to Rabies virus and from whose the CNS Negri virus particles are detected histopathologically.

#### Diagnostic/analytical methods used

Other: Hellers stain

#### **Vaccination policy**

Rabies vaccination is voluntary as Cyprus is free from Rabies.

In case the animal is to travel abroad and in order for it to reenter free, the relevant Rabies vaccination and/or antibodies titration should take place within the required time frame, as provided by the provisions in force (www.moa.gov.cy/vs Useful Information link).

#### Other preventive measures than vaccination in place

Quarantine

#### **Control program/mechanisms**

#### The control program/strategies in place

The relevant chekcs are performed by both the Customs Department and the Veterinary Services upon the animals arrival at the Republic of Cyprus' official points of entry.

#### Measures in case of the positive findings or single cases

The suspect animal is euthanised and confiscated for further examination by the Veterinary Services. Any possible human or animal contact with the suspect animal is traced back and appropriately treated in case of humans. As far as animals is concerned they are confiscated and isolated so as to safeguard the proper handling in case of new positive cases.

#### **Notification system in place**

Mandatory Notifiable

#### Results of the investigation

#### Investigations of the human contacts with positive cases

Any human contacts in case of a rabies incidence are traced and appropriately checked by the Public Health Services of the Ministry of Health.

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

Cyprus - 2008 Report on trends and sources of zoonoses

Cyprus is free from Rabies

Cyprus - 2008

# **2.12 Q-FEVER**

2.12.1 General evaluation of the national situation

# 3. INFORMATION ON SPECIFIC INDICATORS OF ANTIMICROBIAL RESISTANCE

## 3.1 ENTEROCOCCUS, NON-PATHOGENIC

#### 3.1.1 General evaluation of the national situation

## 3.2 ESCHERICHIA COLI, NON-PATHOGENIC

#### 3.2.1 General evaluation of the national situation

#### A. Escherichia coli general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

Cyprus -	2008	Report of	n trends	and	sources	of z	conoses

# 4. INFORMATION ON SPECIFIC MICROBIOLOGICAL AGENTS

## 4.1 HISTAMINE

- 4.1.1 General evaluation of the national situation
- 4.1.2 Histamine in foodstuffs

## 4.2 ENTEROBACTER SAKAZAKII

- 4.2.1 General evaluation of the national situation
- 4.2.2 Enterobacter sakazakii in foodstuffs

## 4.3 STAPHYLOCOCCAL ENTEROTOXINS

- 4.3.1 General evaluation of the national situation
- 4.3.2 Staphylococcal enterotoxins in foodstuffs

### 5. FOODBORNE

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.

#### A. Foodborne outbreaks

System in place for identification, epidemological investigations and reporting of

NO DATA AVAILABLE

Description of the types of outbreaks covered by the reporting:

NO DATA AVAILABLE

National evaluation of the reported outbreaks in the country:

Trends in numbers of outbreaks and numbers of human cases involved

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the different type of places of food production and preparation in outbreaks

NO DATA AVAILABLE

Evaluation of the severity and clinical picture of the human cases

NO DATA AVAILABLE

Descriptions of single outbreaks of special interest

NO DATA AVAILABLE

Control measures or other actions taken to improve the situation

NO DATA AVAILABLE

Suggestions to the community for the actions to be taken

NO DATA AVAILABLE

**Additional information** 

NO DATA AVAILABLE

#### Foodborne Outbreaks: summarized data

	Total number of outbreaks	Outbreaks	Human cases	Hospitalized	Deaths	Number of verified outbreaks
Bacillus	0	0	unknown	unknown	unknown	0
Campylobacter	0	0	unknown	unknown	unknown	0
Clostridium	0	0	unknown	unknown	unknown	0
Escherichia coli, pathogenic	0	0	unknown	unknown	unknown	0
Foodborne viruses	0	0	unknown	unknown	unknown	0
Listeria	0	0	unknown	unknown	unknown	0
Other agents	0	0	unknown	unknown	unknown	0
Parasites	0	0	unknown	unknown	unknown	0
Salmonella	0	0	unknown	unknown	unknown	0
Staphylococcus	0	0	unknown	unknown	unknown	0
Unknown	0	0	unknown	unknown	unknown	0
Yersinia	0	0	unknown	unknown	unknown	0

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