

CYPRUS

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

TRENDS AND SOURCES OF ZOONOSSES AND ZOOTIC AGENTS IN HUMANS, FOODSTUFFS, ANIMALS AND FEEDSTUFFS

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

IN 2010

INFORMATION ON THE REPORTING AND MONITORING SYSTEM

Country: Cyprus

Reporting Year:

Laboratory name	Description	Contribution
Necropsy Lab	Microbiology Necropsy	Microbiological and Pathologoanatomy data
Animal Health Lab	AHL	Animal Health microbiological data
Lab for the Control of Food of Animal Origin	LCFAO	Food Safety and Food Microbiology data

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 2010 .

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.

* 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 animals present until the end of December 2010.

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

The total bovine population is estimated to 56,180 animals, reared in 361 herds. The population under the brucellosis program is 38,636 animals in 320 herds.

The total sheep and goat population is estimated to 538,823 reared in 3,327 flocks. The population under the brucellosis program is 444,220 animals reared in 3,185 flocks.

Table Susceptible animal populations

* Only if different than current reporting year

Animal species	Category of animals	Number of herds or flocks		Number of slaughtered animals		Livestock numbers (live animals)		Number of holdings	
		Data	Year*	Data	Year*	Data	Year*	Data	Year*
Cattle (bovine animals)	mixed herds							361	
	dairy cows and heifers					38636			
	calves (under 1 year)					17544			
	- in total					56180			
Ducks	grandparent breeding flocks	0		0		0		0	
	mixed flocks/holdings	0		0		0		0	
	parent breeding flocks	0		0		0		0	
	meat production flocks	0		0	2010	0	2010	0	2010
	breeding flocks, unspecified - in total	0		0		0		0	
	elite breeding flocks	0		0		0		0	
	- in total	0		0		0		0	
Gallus gallus (fowl)	elite breeding flocks, unspecified - in total	0		0		0		0	
	mixed flocks/holdings	0		0		0		0	

Table Susceptible animal populations

Animal species	Category of animals	Number of herds or flocks		Number of slaughtered animals		Livestock numbers (live animals)		Number of holdings	
		Data	Year*	Data	Year*	Data	Year*	Data	Year*
Gallus gallus (fowl)	grandparent breeding flocks for egg production line	0		0		0		0	
	parent breeding flocks for egg production line	0		0		0		0	
	breeding flocks for egg production line - in total	5				20000		5	
	broilers	2000		11088000				105	
	elite breeding flocks for meat production line	0		0		0		0	
	laying hens	93				511000		37	
	breeding flocks for meat production line - in total	73				350000		14	
	parent breeding flocks for meat production line	0		0		0		0	
	grandparent breeding flocks for meat production line	0		0		0		0	
	elite breeding flocks for egg production line	0		0		0		0	
	- in total	2171		11088000		881000		161	
Geese	grandparent breeding flocks	0		0		0		0	
	breeding flocks, unspecified - in total	0		0		0		0	
	mixed flocks/holdings	0		0		0		0	

Table Susceptible animal populations

Animal species	Category of animals	Number of herds or flocks		Number of slaughtered animals		Livestock numbers (live animals)		Number of holdings	
		Data	Year*	Data	Year*	Data	Year*	Data	Year*
Geese	meat production flocks	0		0		0		0	
	elite breeding flocks	0		0		0		0	
	parent breeding flocks	0		0		0		0	
	- in total	0		0		0		0	
Goats	mixed herds							3327	
	animals over 1 year ¹⁾					444220			
	- in total ²⁾					538823		3327	
Pigs	- in total							105	
Sheep	animals over 1 year ³⁾					444220			
	mixed herds							3327	
	- in total ⁴⁾					538823		3327	
Turkeys	parent breeding flocks	0		0		0		0	
	grandparent breeding flocks	0		0		0		0	
	breeding flocks, unspecified - in total	0		0		0		0	

Table Susceptible animal populations

		Number of herds or flocks		Number of slaughtered animals		Livestock numbers (live animals)		Number of holdings	
Animal species	Category of animals	Data	Year*	Data	Year*	Data	Year*	Data	Year*
Turkeys	elite breeding flocks	0		0		0		0	
	meat production flocks	0		0		0		0	
	mixed flocks/holdings	0		0		0		0	
	- in total	0		0		0		0	

Comments:

- 1) *The livestock is over 6 months.
- 2) *The goat population is incorporated with the sheep population.
- 3) *The livestock is over 6 months.
- 4) *The sheep population is incorporated with the goat population.

2. INFORMATION ON SPECIFIC ZOO NOSES 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 surveillance 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

Additional information

The relevant data for 2009 will be submitted by the colleagues of the Ministry of Health through the ECDC database network.

The relevant data for 2009 will be submitted by the colleagues of the Ministry of Health through the ECDC database network.

2.1.3 Salmonella in foodstuffs

A. 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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

B. 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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

C. 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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

D. 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

E. 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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

Table Salmonella in poultry meat and products thereof

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified
Meat from broilers (Gallus gallus) - fresh - at slaughterhouse	LCFAO	Batch	25gr	184	0			
Meat from broilers (Gallus gallus) - fresh - at processing plant	LCFAO	Batch	25gr	80	35			35
Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - at retail	LCFAO	Batch	25gr	10	0			
Meat from broilers (Gallus gallus) - meat products - raw but intended to be eaten cooked - at processing plant	LCFAO	Batch	25gr	85	5			5
Meat from broilers (Gallus gallus) - minced meat - intended to be eaten cooked - at retail	LCFAO	Batch	25gr	15	5			5

Table Salmonella in milk and dairy products

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified
Cheeses made from cows' milk - soft and semi-soft - made from raw or low heat-treated milk - at processing plant	LCFAO	Batch	25gr	1085	0			
Cheeses made from goats' milk - at processing plant	LCFAO	Batch	25gr	175	0			
Dairy products (excluding cheeses) - milk powder and whey powder - at processing plant	LCFAO	Batch	25gr	5	0			
Dairy products (excluding cheeses) - yoghurt - at retail - domestic production - Survey - national survey	LCFAO	Batch	25gr	475	0			

Table Salmonella in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified
Eggs - table eggs - at packing centre	LCFAO	Batch	400gr	241	0			
Other food - at retail - domestic production - Monitoring - official sampling - objective sampling ¹⁾	LCFAO	Batch	25gr	100	5			5

Comments:

¹⁾ Fish - Smoked

Table Salmonella in red meat and products thereof

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified
Meat from bovine animals - fresh - at slaughterhouse	LCFAO	Batch	25gr	10	0			
Meat from bovine animals - meat products - cooked, ready-to-eat - at retail	LCFAO	Batch	25gr	15	0			
Meat from bovine animals - meat products - raw but intended to be eaten cooked - at retail	LCFAO	Batch	25gr	85	3			3
Meat from bovine animals - minced meat - intended to be eaten raw - at retail	LCFAO	Batch	25gr	25	0			
Meat from pig - fresh - at slaughterhouse	LCFAO	Batch	25gr	10	0			
Meat from pig - meat preparation - intended to be eaten cooked - at retail	LCFAO	Batch	25gr	300	10			10
Meat from pig - meat products - cooked, ready-to-eat - at retail	LCFAO	Batch	25gr	406	0			
Meat from pig - minced meat - intended to be eaten cooked - at retail	LCFAO	Batch	25gr	175	5			5
Meat from sheep - fresh - at slaughterhouse	LCFAO	Batch	25gr	1	0			
Other products of animal origin - gelatin and collagen ¹⁾	LCFAO	Batch	25gr	67	0			

Comments:

¹⁾ Meat from farmed game - land mammals - fresh meat (rabbit)

Table Salmonella in red meat and products thereof

2.1.4 Salmonella in animals

A. 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

B. 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

C. 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

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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 (as a source of infection)

NO DATA AVAILABLE

Additional information

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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

E. 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 (as a source of infection)

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	S. Enteritidis	S. Hadar	S. Infantis	S. Typhimurium	S. Virchow	S. 1,4,[5],12:i:-
Gallus gallus (fowl) - parent breeding flocks for egg production line - adult	5	Veterinary Services	Flock	44	0						
	Salmonella spp., unspecified										
Gallus gallus (fowl) - parent breeding flocks for egg production line - adult											

Footnote:
Out of the 78 existing flocks only 44 where eligible to be checked for Salmonella in adults.

Table Salmonella in other birds

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified
Ostriches	Veterinary Services	Herd	1	0			
Partridges	Veterinary Services	Herd	4	0			

Table Salmonella in other animals

	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	S. 1,4,[5],12:i:-	Salmonella spp., unspecified	S. Bredeney
Cattle (bovine animals)	Veterinary Services Pathology Lab	Animal	3	3		2			1
Cattle (bovine animals) - calves (under 1 year)		---							

Table Salmonella in other poultry

	Number of existing flocks	Source of information	Sampling unit	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	S. 1,4,[5],12:i:-	Salmonella spp., unspecified	Other serovars	S. Braenderup
Gallus gallus (fowl) - laying hens - adult - at farm - Control and eradication programmes - official and industry sampling	119	Veterinary Services AHWD Salmonella Section	Flock	63	12	3	0	0	0	1	1
Gallus gallus (fowl) - laying hens - adult - at farm - Control and eradication programmes - sampling by industry	119	Veterinary Services AHWD Salmonella Section	Flock	33	0						
Gallus gallus (fowl) - laying hens - adult - at farm - Control and eradication programmes - official sampling - objective sampling	119	Veterinary Services AHWD Salmonella Section	Flock	60	12	3	0	0	0	1	1
Gallus gallus (fowl) - broilers - before slaughter - at farm - Control and eradication programmes - official and industry sampling	2016	Veterinary Services AHWD Salmonella Section	Flock	643	124	0	0	0	120	3	
		S. Dessau	S. Infantis	S. Kedougou	S. Livingstone	S. Montevideo	S. Virchow - PT 31				
Gallus gallus (fowl) - laying hens - adult - at farm - Control and eradication programmes - official and industry sampling		1	1	1	1	3					
Gallus gallus (fowl) - laying hens - adult - at farm - Control and eradication programmes - sampling by industry											

Table Salmonella in other poultry

	S. Dessau	S. Infantis	S. Kedougou	S. Livingstone	S. Montevideo	S. Virchow - PT 31
Gallus gallus (fowl) - laying hens - adult - at farm - Control and eradication programmes - official sampling - objective sampling		1	1	1	1	3
Gallus gallus (fowl) - broilers - before slaughter - at farm - Control and eradication programmes - official and industry sampling	1					

2.1.5 Salmonella in feedingstuffs

Table Salmonella in feed material of animal origin

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Salmonella	S. Enteritidis	S. Typhimurium	Salmonella spp., unspecified
Feed material of land animal origin - meat meal ¹⁾	LCFAO	Batch	25g	15	1			1
Feed material of land animal origin - poultry offal meal ²⁾	LCFAO	Batch	25g	5	1	0	0	1

Comments:

- ¹⁾ At Farm
- ²⁾ At Farm

2.1.6 Salmonella serovars and phagetype distribution

The methods of collecting, isolating and testing of the Salmonella isolates are described in the chapters above respectively for each animal species, foodstuffs and humans. The serotype and phagetype distributions can be used to investigate the sources of the Salmonella infections in humans. Findings of same serovars and phagetypes in human cases and in foodstuffs or animals may indicate that the food category or animal species in question serves as a source of human infections. However as information is not available from all potential sources of infections, conclusions have to be drawn with caution.

Table Salmonella serovars in food

Serovar	Meat from bovine animals		Meat from pig		Meat from broilers (Gallus gallus)		Meat from other poultry species		Other products of animal origin	
	Monitoring	Surveillance	Monitoring	Surveillance	Monitoring	Surveillance	Monitoring	Surveillance	Monitoring	Surveillance
Sources of isolates										
Number of isolates in the laboratory	1				2					
Number of isolates serotyped	1	0	0	0	2	0	0	0	0	0
Number of isolates per serovar										
S. Bredeney	1									
S. Saintpaul					2					

2.1.7 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

B. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

C. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

D. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

E. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

F. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

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

Salmonella Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:	S. Enteritidis		S. Typhimurium		Salmonella spp.	
	yes		yes		yes	
	3		0		11	
	N	n	N	n	N	n
Amphenicols - Chloramphenicol	3	0			11	0
Amphenicols - Florfenicol	3	0			11	0
Cephalosporins - 3rd generation cephalosporins	3	0			11	0
Fluoroquinolones - Ciprofloxacin	3	0			11	2
Quinolones - Nalidixic acid	3	0			11	0
Trimethoprim	3	0			11	1
Sulphonamides - Sulfonamide	3	0			11	1
Aminoglycosides - Streptomycin	3	0			11	0
Aminoglycosides - Gentamicin	3	0			11	0
Aminoglycosides - Kanamycin	3	0			11	0
Penicillins - Ampicillin	3	0			11	0
Tetracyclines - Tetracycline	3	0			11	0
Fully sensitive	3	0			11	0
Resistant to 1 antimicrobial	3	0			11	2
Resistant to 2 antimicrobials	3	0			11	1
Resistant to 3 antimicrobials	3	0			11	0
Resistant to 4 antimicrobials	3	0			11	0
Resistant to >4 antimicrobials	3	0			11	0

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

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

Salmonella Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory	S. Enteritidis		S. Typhimurium		Salmonella spp.	
	yes		yes		yes	
	3		0		10	
	N	n	N	n	N	n
Antimicrobials:						
Amphenicols - Chloramphenicol	3	0			10	0
Amphenicols - Florfenicol	3	0			10	0
Cephalosporins - 3rd generation cephalosporins	3	0			10	0
Fluoroquinolones - Ciprofloxacin	3	0			10	2
Quinolones - Nalidixic acid	3	0			10	0
Trimethoprim	3	0			10	1
Sulphonamides - Sulfonamide	3	0			10	1
Aminoglycosides - Streptomycin	3	0			10	0
Aminoglycosides - Gentamicin	3	0			10	0
Aminoglycosides - Kanamycin	3	0			10	0
Penicillins - Ampicillin	3	0			10	0
Tetracyclines - Tetracycline	3	0			10	0
Fully sensitive	3	0			10	0
Resistant to 1 antimicrobial	3	0			10	2
Resistant to 2 antimicrobials	3	0			10	1
Resistant to 3 antimicrobials	3	0			10	0
Resistant to 4 antimicrobials	3	0			10	0
Resistant to >4 antimicrobials	3	0			10	0

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

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

Salmonella Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory Antimicrobials:	S. Enteritidis		S. Typhimurium		Salmonella spp.	
					yes	
					1	
	N	n	N	n	N	n
Amphenicols - Chloramphenicol					1	0
Amphenicols - Florfenicol					1	0
Cephalosporins - 3rd generation cephalosporins					1	0
Fluoroquinolones - Ciprofloxacin					1	0
Quinolones - Nalidixic acid					1	0
Trimethoprim					1	0
Sulphonamides - Sulfonamide					1	0
Aminoglycosides - Streptomycin					1	0
Aminoglycosides - Gentamicin					1	0
Aminoglycosides - Kanamycin					1	0
Penicillins - Ampicillin					1	0
Tetracyclines - Tetracycline					1	0
Fully sensitive					1	0
Resistant to 1 antimicrobial					1	0
Resistant to 2 antimicrobials					1	0
Resistant to 3 antimicrobials					1	0
Resistant to 4 antimicrobials					1	0
Resistant to >4 antimicrobials					1	0

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

Table Antimicrobial susceptibility testing of S. Enteritidis in Gallus gallus (fowl) - laying hens - adult - unspecified - quantitative data [Diffusion method]

Zone diameter (mm), number of isolates with a zone of inhibition equal to

S. Enteritidis		Gallus gallus (fowl) - laying hens - adult - unspecified																											
		yes																											
		3																											
Antimicrobials:	Cut-off value	N	n	<=6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			
Amphenicols - Chloramphenicol		3	0	2		1																							
Amphenicols - Florfenicol		3	0	2		1																							
Tetracyclines - Tetracycline		3	0	3																									
Fluoroquinolones - Ciprofloxacin		3	0	3																									
Quinolones - Nalidixic acid		3	0	3																									
Trimethoprim		3	0	3																									
Sulphonamides - Sulfonamide		3	0																										
Aminoglycosides - Streptomycin		3	0	3																									
Aminoglycosides - Gentamicin		3	0	3																									
Aminoglycosides - Kanamycin		3	0	3																									
Penicillins - Ampicillin		3	0	3																									
Cephalosporins - Cefotaxim		3	0	3																									
Cephalosporins - Ceftazidim		3	0	3																									

Table Antimicrobial susceptibility testing of *S. Enteritidis* in *Gallus gallus* (fowl) - laying hens - adult - unspecified - quantitative data [Diffusion method]

S. Enteritidis Isolates out of a monitoring program (yes/no) Number of isolates available in the laboratory	Gallus gallus (fowl) - laying hens - adult - unspecified						
	yes						
	3						
	29	30	31	32	33	34	>=35
Antimicrobials:							
Amphenicols - Chloramphenicol							
Amphenicols - Florfenicol							
Tetracyclines - Tetracycline							
Fluoroquinolones - Ciprofloxacin							
Quinolones - Nalidixic acid							
Trimethoprim							
Sulphonamides - Sulfonamide				2			1
Aminoglycosides - Streptomycin							
Aminoglycosides - Gentamicin							
Aminoglycosides - Kanamycin							
Penicillins - Ampicillin							
Cephalosporins - Cefotaxim							
Cephalosporins - Ceftazidim							

Table Antimicrobial susceptibility testing of *S. Enteritidis* in *Gallus gallus* (fowl) - laying hens - adult - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Enteritidis	Gallus gallus (fowl) - laying hens - adult																										
	yes																										
	3																										
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Antimicrobials:																											
Amphenicols - Chloramphenicol	16	3	0								1	1	1														
Amphenicols - Florfenicol	16	3	0								1	1	1														
Tetracyclines - Tetracycline	8	3	0							2	1																
Fluoroquinolones - Ciprofloxacin	0.06	3	0		2	1																					
Quinolones - Nalidixic acid	16	3	0									3															
Trimethoprim	2	3	0						2	1																	
Sulphonamides - Sulfonamide	256	3	0												2	1											
Aminoglycosides - Streptomycin	32	3	0									3															
Aminoglycosides - Gentamicin	2	3	0					2	1																		
Aminoglycosides - Kanamycin	64	3	0									3															
Penicillins - Ampicillin	4	3	0							1	2																
Cephalosporins - Cefotaxim	0.5	3	0				1	2																			

Table Antimicrobial susceptibility testing of *S. Virchow* in *Gallus gallus* (fowl) - laying hens - adult - unspecified - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Virchow	Gallus gallus (fowl) - laying hens - adult - unspecified																										
	yes																										
	3																										
	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	3	0											3													
Amphenicols - Florfenicol	16	3	0										3														
Tetracyclines - Tetracycline	8	3	0								1	2															
Fluoroquinolones - Ciprofloxacin	0.06	3	2		1				1	1																	
Quinolones - Nalidixic acid	16	3	0										1	2													
Trimethoprim	2	3	0							2	1																
Sulphonamides - Sulfonamide	256	3	0											1	1	1											
Aminoglycosides - Streptomycin	32	3	0											1	2												
Aminoglycosides - Gentamicin	2	3	0							3																	
Aminoglycosides - Kanamycin	64	3	0										3														
Penicillins - Ampicillin	4	3	0								2	1															
Cephalosporins - Cefotaxim	0.5	3	0				2		1																		

Table Antimicrobial susceptibility testing of S. Braenderup in Gallus gallus (fowl) - laying hens - adult - unspecified - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Braenderup	Gallus gallus (fowl) - laying hens - adult - unspecified																									
	yes																									
	1																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:																										
Amphenicols - Chloramphenicol	16	1	0										1													
Amphenicols - Florfenicol	16	1	0									1														
Tetracyclines - Tetracycline	8	1	0							1																
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1																					
Quinolones - Nalidixic acid	16	1	0									1														
Trimethoprim	2	1	0					1																		
Sulphonamides - Sulfonamide	256	1	0												1											
Aminoglycosides - Streptomycin	32	1	0											1												
Aminoglycosides - Gentamicin	2	1	0						1																	
Aminoglycosides - Kanamycin	64	1	0									1														
Penicillins - Ampicillin	4	1	0								1															
Cephalosporins - Cefotaxim	0.5	1	0				1																			

Table Antimicrobial susceptibility testing of *S. Infantis* in *Gallus gallus* (fowl) - laying hens - adult - unspecified - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Infantis	Gallus gallus (fowl) - laying hens - adult - unspecified																										
	yes																										
	1																										
	Cut-off value	N	n	≤0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest		
Amphenicols - Chloramphenicol	16	1	0											1													
Amphenicols - Florfenicol	16	1	0											1													
Tetracyclines - Tetracycline	8	1	0									1															
Fluoroquinolones - Ciprofloxacin	0.06	1	0			1																					
Quinolones - Nalidixic acid	16	1	0										1														
Trimethoprim	2	1	0							1																	
Sulphonamides - Sulfonamide	256	1	0														1										
Aminoglycosides - Streptomycin	32	1	0							1																	
Aminoglycosides - Gentamicin	2	1	0							1																	
Aminoglycosides - Kanamycin	64	1	0										1														
Penicillins - Ampicillin	4	1	0								1																
Cephalosporins - Cefotaxim	0.5	1	0					1																			

Table Antimicrobial susceptibility testing of S. Kedougou in Gallus gallus (fowl) - laying hens - adult - unspecified - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Kedougou	Gallus gallus (fowl) - laying hens - adult - unspecified																									
	yes																									
	1																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:																										
Amphenicols - Chloramphenicol	16	1	0										1													
Amphenicols - Florfenicol	16	1	0									1														
Tetracyclines - Tetracycline	8	1	0								1															
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1																					
Quinolones - Nalidixic acid	16	1	0									1														
Trimethoprim	2	1	0						1																	
Sulphonamides - Sulfonamide	256	1	0												1											
Aminoglycosides - Streptomycin	32	1	0											1												
Aminoglycosides - Gentamicin	2	1	0						1																	
Aminoglycosides - Kanamycin	64	1	0									1														
Penicillins - Ampicillin	4	1	0								1															
Cephalosporins - Cefotaxim	0.5	1	0			1																				

Table Antimicrobial susceptibility testing of *S. Livingstone* in *Gallus gallus* (fowl) - laying hens - adult - unspecified - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Livingstone	Gallus gallus (fowl) - laying hens - adult - unspecified																									
	yes																									
	1																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:																										
Amphenicols - Chloramphenicol	16	1	0										1													
Amphenicols - Florfenicol	16	1	0										1													
Tetracyclines - Tetracycline	8	1	0								1															
Fluoroquinolones - Ciprofloxacin	0.06	1	0			1																				
Quinolones - Nalidixic acid	16	1	0									1														
Trimethoprim	2	1	0							1																
Sulphonamides - Sulfonamide	256	1	0														1									
Aminoglycosides - Streptomycin	32	1	0										1													
Aminoglycosides - Gentamicin	2	1	0							1																
Aminoglycosides - Kanamycin	64	1	0									1														
Penicillins - Ampicillin	4	1	0								1															
Cephalosporins - Cefotaxim	0.5	1	0				1																			

Table Antimicrobial susceptibility testing of *S. Montevideo* in *Gallus gallus* (fowl) - laying hens - adult - unspecified - Monitoring - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Montevideo	Gallus gallus (fowl) - laying hens - adult - unspecified - Monitoring																									
	yes																									
	1																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:																										
Amphenicols - Chloramphenicol	16	1	0										1													
Amphenicols - Florfenicol	16	1	0										1													
Tetracyclines - Tetracycline	8	1	0									1														
Fluoroquinolones - Ciprofloxacin	0.06	1	0			1																				
Quinolones - Nalidixic acid	16	1	0									1														
Trimethoprim	2	1	1												1											
Sulphonamides - Sulfonamide	256	1	1																	1						
Aminoglycosides - Streptomycin	32	1	0											1												
Aminoglycosides - Gentamicin	2	1	0						1																	
Aminoglycosides - Kanamycin	64	1	0									1														
Penicillins - Ampicillin	4	1	0								1															
Cephalosporins - Cefotaxim	0.5	1	0					1																		

Table Antimicrobial susceptibility testing of S. Dessau in Gallus gallus (fowl) - broilers - unspecified - quantitative data [Dilution method]

Concentration (µg/ml), number of isolates with a concentration of inhibition equal to

S. Dessau	Gallus gallus (fowl) - broilers - unspecified																									
	yes																									
	1																									
	Cut-off value	N	n	<=0.008	0.015	0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	64	128	256	512	1024	2048	>2048	lowest	highest	
Antimicrobials:																										
Amphenicols - Chloramphenicol	16	1	0										1													
Amphenicols - Florfenicol	16	1	0									1														
Tetracyclines - Tetracycline	8	1	0								1															
Fluoroquinolones - Ciprofloxacin	0.06	1	0		1																					
Quinolones - Nalidixic acid	16	1	0									1														
Trimethoprim	2	1	0						1																	
Sulphonamides - Sulfonamide	256	1	0												1											
Aminoglycosides - Streptomycin	32	1	0												1											
Aminoglycosides - Gentamicin	2	1	0						1																	
Aminoglycosides - Kanamycin	64	1	0									1														
Penicillins - Ampicillin	4	1	0							1																
Cephalosporins - Cefotaxim	0.5	1	0				1																			

Table Cut-off values for antibiotic resistance testing of Salmonella in Animals

Test Method Used		Standard methods used for testing		
Broth dilution		NCCLS/CLSI EUCAST, ARBAO		

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol	EUCAST	16	
	Florfenicol	EUCAST	16	
Tetracyclines	Tetracycline	EUCAST	8	
Fluoroquinolones	Ciprofloxacin	EUCAST	0.06	
Quinolones	Nalidixic acid	EUCAST	16	
Trimethoprim	Trimethoprim	EUCAST	2	
Sulphonamides	Sulphonamides	CLSI	256	
Aminoglycosides	Streptomycin	ARBAO	32	
	Gentamicin	EUCAST	2	
	Kanamycin	CLSI	64	
Cephalosporins	Cefotaxim	EUCAST	0.5	
	Ceftazidim	EUCAST	2	
Penicillins	Ampicillin	EUCAST	4	

Table Cut-off values for antibiotic resistance testing of Salmonella in Animals

Table Cut-off values for antibiotic resistance testing of Salmonella in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.06	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulphonamides	Sulphonamides		256	
Aminoglycosides	Streptomycin		32	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.5	
Penicillins	Ampicillin		4	

Table Cut-off values for antibiotic resistance testing of Salmonella in Food

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.06	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulphonamides	Sulphonamides		256	
Aminoglycosides	Streptomycin		32	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.5	
Penicillins	Ampicillin		4	

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 (as a source of infection)

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.

Additional information

The relevant data for 2009 will be submitted by the colleagues of the Ministry of Health through the ECDC network.

The relevant data for 2009 will be submitted by the colleagues of the Ministry of Health through the ECDC network.

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

Table Campylobacter in other food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Campylobacter	C. coli	C. jejuni	C. lari	C. upsaliensis	Thermophilic Campylobacter spp., unspecified
Meat from other animal species or not specified ¹⁾	Veterinary Services, LCFAO	Batch	10	3	0					

Comments:

¹⁾ It concerns fresh rabbit meat obtained from the slaughterhouse during the official controls

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

NO DATA AVAILABLE

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

NO 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

B. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

C. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

D. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

E. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

F. 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

Cut-off values 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 (as a source of infection)

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

Table Cut-off values used for antimicrobial susceptibility testing of C. coli in Animals

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		2	
	Streptomycin		4	
Macrolides	Erythromycin		16	

Table Cut-off values used for antimicrobial susceptibility testing of C. coli in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		2	
	Streptomycin		4	
Macrolides	Erythromycin		16	

Table Cut-off values used for antimicrobial susceptibility testing of *C. coli* in Food

Test Method Used	Standard methods used for testing

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		2	
	Streptomycin		4	
Macrolides	Erythromycin		16	

Table Cut-off values used for antimicrobial susceptibility testing of *C. jejuni* in Animals

Test Method Used	Standard methods used for testing

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		1	
	Streptomycin		2	
Macrolides	Erythromycin		4	

Table Cut-off values used for antimicrobial susceptibility testing of C. jejuni in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		1	
	Streptomycin		2	
Macrolides	Erythromycin		4	

Table Cut-off values used for antimicrobial susceptibility testing of *C. jejuni* in Food

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Tetracyclines	Tetracycline		2	
Fluoroquinolones	Ciprofloxacin		1	
Aminoglycosides	Gentamicin		1	
	Streptomycin		2	
Macrolides	Erythromycin		4	

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 (as a source of infection)

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 MICROBIOLOGY 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.

Additional information

The report of these data will be done by the colleagues of the Ministry of Health through the ECDC
database network.

The report of these data will be done by the colleagues of the Ministry of Health through the ECDC database network.

2.3.3 Listeria in foodstuffs

Table Listeria monocytogenes in milk and dairy products

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for L. monocytogenes	Units tested with detection method	Listeria monocytogenes presence in x g	Units tested with enumeration method	> detection limit but ≤ 100 cfu/g	L. monocytogenes > 100 cfu/g
Milk, cows' - pasteurised milk - at retail	Veterinary Services, LCFAO	Single		5	0	5	0			
Cheeses, made from mixed milk from cows, sheep and/or goats - fresh - made from pasteurised milk - at processing plant - domestic production - Surveillance - official controls (Fresh Anari cheese)	Veterinary Services, LCFAO	Single	25gr	90	0	90	0			
Cheeses, made from mixed milk from cows, sheep and/or goats - hard - at processing plant - domestic production - Surveillance - official controls - objective sampling (Dry Anari cheese)	Veterinary Services, LCFAO	Single	25gr	80	0	80	0			
Cheeses, made from mixed milk from cows, sheep and/or goats - hard - made from pasteurised milk - at processing plant - domestic production - Surveillance - official controls - objective sampling (Halloumi cheese)	Veterinary Services, LCFAO	Single	25gr	770	0	770	0			
Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - at processing plant - domestic production - Surveillance (Flaouna cheese)	Veterinary Services, LCFAO	Single	25gr	175	0	175	0			
Cheeses, made from mixed milk from cows, sheep and/or goats - soft and semi-soft - made from pasteurised milk - at processing plant - domestic production - Surveillance - official controls - objective sampling (White semi-soft cheese (Feta type cheese))	Veterinary Services, LCFAO	Single	25gr	20	0	20	0			

Table *Listeria monocytogenes* in milk and dairy products

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for <i>L. monocytogenes</i>	Units tested with detection method	<i>Listeria monocytogenes</i> presence in x g	Units tested with enumeration method	> detection limit but ≤ 100 cfu/g	<i>L. monocytogenes</i> > 100 cfu/g
Cheeses, made from mixed milk from cows, sheep and/or goats - unspecified - made from pasteurised milk - at processing plant - domestic production - Surveillance - official controls - objective sampling (Several types of cheeses.)	Veterinary Services, LCFAO	Single	25gr	120	0	120	0			
Dairy products (excluding cheeses) - fermented dairy products - at processing plant - domestic production - Surveillance - official controls - objective sampling (Airani/Kefir)	Veterinary Services, LCFAO	Single	25gr	55	0	55	0			
Dairy products (excluding cheeses) - yoghurt - at processing plant - domestic production - Surveillance - official controls (Yogurt)	Veterinary Services, LCFAO	Single	25gr	475	0	475	0			

Table Listeria monocytogenes in other foods

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for L. monocytogenes	Units tested with detection method	Listeria monocytogenes presence in x g	Units tested with enumeration method	> detection limit but ≤ 100 cfu/g	L. monocytogenes > 100 cfu/g
Meat from bovine animals - fresh	Veterinary Services, LCFAO	Single	25gr	5	0	5	0			
Meat from bovine animals - meat products - cooked, ready-to-eat - at processing plant	Veterinary Services, LCFAO	Single	25gr	15	0	15	0			
Meat from broilers (Gallus gallus) - meat products - cooked, ready-to-eat - at processing plant	Veterinary Services, LCFAO	Single	25gr	5	0	5	0			
Cereals and meals - at processing plant - domestic production - Surveillance - official controls (Trachanas)	Veterinary Services	Single	25g	20	0	20	0			

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 (as a source of infection)

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

Additional information

The relevant data for 2010 will be submitted by the colleagues of the Ministry of Health through the ECDC network.

The relevant data for 2010 will be submitted by the colleagues of the Ministry of Health through the ECDC network.

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

NO DATA AVAILABLE

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

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 exercises effective control; thus regularly tested for TB. All slaughtered animals and their carcasses are necroscopically checked, prior to being 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/EEC provisions.

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

In 2010, 213 holdings bore the Bovine Tuberculosis Officially Free Status (BTBOFS) with the target number of holdings being 326 in total.

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.

Additional information

The updated data for TB in humans for 2010 will be furnished by the colleagues of the Ministry of Health through the ECDC.

The updated data for TB in humans for 2010 will be furnished by the colleagues of the Ministry of Health through the ECDC.

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

At the end of 2010, 213 holdings were bearing the Bovine Tuberculosis Officially Free Status (BTBOFS).
The target number of holdings was 326.

Free regions

Almost all bovine holdings in the districts of 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

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

Not applicable.

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

At the end of 2010, 213 holdings were bearing the Bovine Tuberculosis Officially Free Status (BTBOFS). The target number of holdings was 326.

B. Mycobacterium bovis in farmed deer

Monitoring system

Sampling strategy

Not applied as no deer farming is practiced in Cyprus.

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 (as a source of infection)

Not applied.

Additional information

Not applied.

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

If present, the row "Total -1" refers to analogous data of the previous year.

Region	Total number of existing bovine		Officially free herds		Infected herds		Routine tuberculin testing		Number of tuberculin tests carried out before the introduction into the herds (Annex A(I)(2)(c) third indent (1) of Directive 64/432/EEC)	Number of animals with suspicious lesions of tuberculosis examined and submitted to histopathological and bacteriological	Number of animals detected positive in bacteriological examination
	Herds	Animals	Number of herds	%	Number of herds	%	Interval between routine tuberculin tests	Number of animals tested			
Κύπρος / Kibris ¹⁾	361	56180	213	59	0	0	Officially free herds are	45623		3	
Total : ²⁾	361	56180	213	59	0	0	0	45623	0	3	0

Comments:

¹⁾ Results of bacteriological examination are pending²⁾ 0

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 2009, 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:

• 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 (as a source of infection)

There were no human cases of brucellosis during 2009.

Recent actions taken to control the zoonoses

The brucellosis eradication programme is applied at the area controlled by the Veterinary Services of the Republic of Cyprus as of 2001.

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

Additional information

Te data concerning the human cases of Brucellosis will be registered by the colleagues of the Ministry of health through the ECDC network.

The updated data for TB in humans for 2010 will be furnished by the colleagues of the Ministry of Health through the ECDC Database Network.

2.6.3 Brucella in animals

A. Brucella abortus in bovine animals

Status as officially free of bovine brucellosis during the reporting year

The entire country free

Not Applicable

Free regions

Monitoring system

Frequency of the sampling

Vaccination policy

B. abortus has never been isolated in Cyprus.

B. Brucella melitensis in goats

Status as officially free of caprine brucellosis during the reporting year

The entire country free

Not Applicable

Vaccination policy

Vaccination is prohibited

Not applicable in our case.

C. Brucella melitensis in sheep

Status as officially free of ovine brucellosis during the reporting year

The entire country free

Not Applicable

D. 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

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 μ l 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 $\frac{1}{4}$ until $\frac{1}{256}$, 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 2009.

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

There have been no human cases of brucellosis during 2009.

Additional information

As far as it concerns the declaration of officially free herds 291 out of 322 have been declared officially free. The rest are under the procedure of granting the status.

E. 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

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 µl 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 1/4 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 anticomplementary 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 2009.

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

There have been no human cases of brucellosis during 2009

Additional information

As far as it concerns the declaration of officially free flocks 2,049 out of 3,267 are officially free. The rest are under the procedure of been granted the BOF status.

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

If present, the row "Total -1" refers to analogous data of the previous year.

Region	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd Incidence
Κύπρος / Kibris	361	320	281	0	0	0	N.A.	87.81	0	0
Total : ¹⁾	361	320	281	0	0	0	N.A.	87.81	0	0
Total - 1	346	322	294	0	0	0	N.A.	91.3	0	0

Comments:

¹⁾ N.A.

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

If present, the row "Total -1" refers to analogous data of the previous year.

Region	Total number of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	Indicators		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd Incidence
Κύπρος / Kibris	3327	3185	3007	2	1	0	0	94.41	.07	.03
Total : ¹⁾	3327	3185	3007	2	1	0	0	94.41	.07	.03
Total - 1	3413	3267	2677	3	3	0	0	81.94	.11	.11

Comments:

¹⁾ N.A.

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

If present, the row "Total -1" refers to analogous data of the previous year.

Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals - animal prevalence
Κύπρος / Kibris	56180	37757	36908	3231	0	0	0	97.75	0
Total : ¹⁾	56180	37757	36908	3231	0	0	0	97.75	0
Total - 1	55135	39083	31217	4763	0	0	1	79.87	0

Comments:

¹⁾ N.A.

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

If present, the row "Total -1" refers to analogous data of the previous year.

Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested	Number of animals tested individually	Number of positive animals	Slaughtering		Indicators	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals - animal prevalence
Κύπρος / Kibris	538823	444220	252228	252228	2	2	27	56.78	0
Total : ¹⁾	538823	444220	252228	252228	2	2	27	56.78	0
Total - 1	566393	487624	199692	199692	3	3	22	40.95	0

Comments:

¹⁾ N.A.

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

If present, the row "Total -1" refers to analogous data of the previous year.

	Status of herds and animals under the programme													
	Total number of herds and animals under the programme		Unknown		Not free or not officially free				Free or officially free suspended		Free		Officially free	
					Last check positive		Last check negative							
Region	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Κύπρος / Kibris	320	37757	0	0	0	0	61	2673	0	0			259	35084
Total : ¹⁾	320	37757	0	0	0	0	61	2673	0	0	0	0	259	35084
Total - 1	322	39083	0	0	0	0	31	5788	0	0			291	33295

Comments:

¹⁾ N.A.

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

If present, the row "Total -1" refers to analogous data of the previous year.

	Status of herds and animals under the programme													
	Total number of herds and animals under the programme		Unknown		Not free or not officially free				Free or officially free suspended		Free		Officially free	
					Last check positive		Last check negative							
Region	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
Κύπρος / Kıbrıs	3185	444220	0	0	0	0	952	87700	1	781			2232	355739
Total : ¹⁾	3185	444220	0	0	0	0	952	87700	1	781	0	0	2232	355739
Total - 1	3267	487624	0	0	3	2122	1207	124620	8	6036			2049	354846

Comments:

¹⁾ N.A.

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 (as a source of infection)

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. Yersiniosis 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.

Additional information

The relevant data for 2010 will be submitted by the colleagues of the Ministry of Health through the ECDC network.

The report of these data will be done by the colleagues of the Ministry of Health through the ECDC database network.

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

2.8 TRICHINELLOSIS

2.8.1 General evaluation of the national situation

A. Trichinellosis general evaluation

History of the disease and/or infection in the country

Not Present in Cyprus

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

The agent is not present in Cyprus. The relevant examination tests are done as foreseen by the EU and National Legislation in force.

2.8.2 Trichinellosis in humans

A. Trichinellosis in humans

Reporting system in place for the human cases

The report of these data is done by the colleagues of the Ministry of Health through the ECDC.

2.8.3 Trichinella in animals

A. Trichinella in horses

Monitoring system

Sampling strategy

No horse meat consumption is practiced in Cyprus.

No horse meat consumption is practised in Cyprus.

B. Trichinella in pigs

Number of officially recognised Trichinella-free holdings

The disease is not present in Cyprus.

Table Trichinella in animals

	Source of information	Sampling unit	Units tested	Total units positive for Trichinella	T. spiralis	Trichinella spp., unspecified
Foxes	Veterinary Services	Animal	1	0		
Pigs - fattening pigs - raised under controlled housing conditions	Veterinary Services	Animal	720829	0		
Other ruminants - wild - from hunting - Surveillance - official controls - convenience sampling (These samples concern the indigenous breed of Agrino species Ovis gmelini ophion)	Veterinary Services	Animal	17	0		
Rabbits - farmed	Veterinary Services	Animal	4	0		

2.9 ECHINOCOCCOSIS

2.9.1 General evaluation of the national situation

A. Echinococcus spp. general evaluation

History of the disease and/or infection in the country

No text available

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

Additional information

The data for humans will be furnished by the colleagues of the Ministry of Health through the ECDC database network.

The report of these data will be done by the colleagues of the Ministry of Health through the ECDC database network.

2.9.3 Echinococcus in animals

Table Echinococcus in animals

	Source of information	Sampling unit	Region	Units tested	Total units positive for Echinococcus	E. granulosus	E. multilocularis	Echinococcus spp., unspecified
Dogs	Veterinary Services	Animal	Κύπρος / Κίβρις	8	0			
Foxes	Veterinary Services	Animal	Κύπρος / Κίβρις	1	0			
Goats		---						
Pigs	Veterinary Services	Animal	Κύπρος / Κίβρις	720829	0			
Other ruminants - wild - Surveillance - official controls - convenience sampling (These data refer to the indigenous animal breed of Agrino species Ovis gmelini ophion)	Veterinary Services	Animal	Κύπρος / Κίβρις	27	2	0	0	2
Rabbits - farmed - Surveillance - official controls (The animals examined had a natural death.)	Veterinary Services	Animal	Κύπρος / Κίβρις	4	0			
Sheep and goats	Veterinary Services	Animal	Κύπρος / Κίβρις	170	0			

Footnote:

The data concern Foxes, Rabbits and Agrinos (Ovis gmelini ophion) which had died of natural cause.

The data which concern pigs derive from the official inspections which are routinely performed at the slaughterhouses.

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 (as a source of infection)

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

2.10.2 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

Additional information

The relevant data for humans will be submitted by the colleagues of the Ministry of Health through the ECDC network.

The report of these data will be done by the colleagues of the Ministry of Health through the ECDC database network.

2.10.3 Toxoplasma in animals

Table Toxoplasma in animals

	Source of information	Sampling unit	Units tested	Total units positive for Toxoplasma	T. gondii
Sheep and goats - at farm - animal sample - blood - Clinical investigations		Animal	304	34	34

Footnote:
The technique used for detecting Toxoplasma gondii presence was indirect ELISA in blood serum.

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 departure 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 Cyprus 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.

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 MICROBIOLOGY 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

Additional information

The report of these data will be done by the colleagues of the Ministry of Health through the ECDC database network.

The report of these data will be done by the colleagues of the Ministry of Health through the ECDC database network.

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 departure 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 Cyprus 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

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 checks 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 is free from Rabies

Table Rabies in animals

	Source of information	Sampling unit	Region	Units tested	Total units positive for Lyssavirus (rabies)	Lyssavirus, unspecified	Classical rabies virus (genotype 1)	European Bat Lyssavirus - unspecified
Badgers - wild		---						
Bats - wild		---						
Cats		---						
Cats - stray cats		---						
Cattle (bovine animals)		---						
Deer		---						
Deer - wild - fallow deer		---						
Deer - wild - red deer		---						

2.12 STAPHYLOCOCCUS INFECTION

2.12.1 General evaluation of the national situation

2.13 Q-FEVER

2.13.1 General evaluation of the national situation

A. *Coxiella burnetii* (Q-fever) general evaluation

History of the disease and/or infection in the country

No Data Available

2.13.2 Coxiella (Q-fever) in animals

Table Coxiella burnetii (Q fever) in animals

	Source of information	Sampling unit	Units tested	Total units positive for Coxiella (Q-fever)	C. burnetii
Goats	Veterinary Services Pathology Lab	Animal	2	2	2
Sheep	Veterinary Services Pathology Lab	Animal	1	1	1

Footnote:

Thes samples shave been examined with the PCR method

3. INFORMATION ON SPECIFIC INDICATORS OF ANTIMICROBIAL RESISTANCE

3.1 ESCHERICHIA COLI, NON-PATHOGENIC

3.1.1 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 (as a source of infection)

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

3.1.2 Antimicrobial resistance in Escherichia coli, non-pathogenic

Table Cut-off values used for antimicrobial susceptibility testing of Escherichia coli, non-pathogenic in Animals

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.03	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulphonamides	Sulphonamides		256	
Aminoglycosides	Streptomycin		16	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.25	
Penicillins	Ampicillin		8	

Table Cut-off values used for antimicrobial susceptibility testing of Escherichia coli, non-pathogenic in Animals

Table Cut-off values used for antimicrobial susceptibility testing of *Escherichia coli*, non-pathogenic in Feed

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.03	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulphonamides	Sulphonamides		256	
Aminoglycosides	Streptomycin		16	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.25	
Penicillins	Ampicillin		8	

Table Cut-off values used for antimicrobial susceptibility testing of Escherichia coli, non-pathogenic in Food

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Amphenicols	Chloramphenicol		16	
Tetracyclines	Tetracycline		8	
Fluoroquinolones	Ciprofloxacin		0.03	
Quinolones	Nalidixic acid		16	
Trimethoprim	Trimethoprim		2	
Sulphonamides	Sulphonamides		256	
Aminoglycosides	Streptomycin		16	
	Gentamicin		2	
Cephalosporins	Cefotaxim		0.25	
Penicillins	Ampicillin		8	

3.2 ENTEROCOCCUS, NON-PATHOGENIC

3.2.1 General evaluation of the national situation

3.2.2 Antimicrobial resistance in Enterococcus, non-pathogenic isolates

Table Cut-off values for antibiotic resistance of E. faecalis in Animals

Test Method Used	Standard methods used for testing

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		512	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		32	
Tetracyclines	Tetracycline		2	

Table Cut-off values for antibiotic resistance of E. faecalis in Animals

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Oxazolidines	Linezolid		4	

Table Cut-off values for antibiotic resistance of E. faecalis in Feed

Test Method Used		Standard methods used for testing		

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		512	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		32	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

Table Cut-off values for antibiotic resistance of E. faecalis in Food

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		512	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		32	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

Table Cut-off values for antibiotic resistance of E. faecium in Animals

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		128	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		1	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		128	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		1	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

Table Cut-off values for antibiotic resistance of E. faecium in Food

Test Method Used		Standard methods used for testing		
			Concentration (microg/ml)	Zone diameter (mm)
		Standard	Resistant >	Resistant <=
Aminoglycosides	Streptomycin		128	
	Gentamicin		32	
Amphenicols	Chloramphenicol		32	
Penicillins	Ampicillin		4	
Glycopeptides (Cyclic peptides, Polypeptides)	Vancomycin		4	
Macrolides	Erythromycin		4	
Streptogramins	Quinupristin/Dalfopristin		1	
Tetracyclines	Tetracycline		2	
Oxazolidines	Linezolid		4	

4. INFORMATION ON SPECIFIC MICROBIOLOGICAL AGENTS

4.1 ENTEROBACTER SAKAZAKII

4.1.1 General evaluation of the national situation

A. Enterobacter sakazakii general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

4.1.2 Enterobacter sakazakii in foodstuffs

A. Enterobacter sakazakii in foodstuffs

Monitoring system

Sampling strategy

NO DATA AVAILABLE

4.2 HISTAMINE

4.2.1 General evaluation of the national situation

A. Histamine General evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

4.2.2 Histamine in foodstuffs

A. Histamine in foodstuffs

Monitoring system

Sampling strategy

NO DATA AVAILABLE

Table Histamine in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units in non-conformity	<= 100 mg/kg	>100 - <= 200 mg/kg	>200 - <= 400 mg/kg	> 400 mg/kg
Fish - Fishery products from fish species associated with a high amount of histidine - not enzyme matured ¹⁾	Veterinary Services, LCFAO	Batch	100g	10	1	9	0	1	0
Fish - Fishery products which have undergone enzyme maturation treatment in brine ²⁾	Veterinary Services, LCFAO	Batch	100g	1	0	1	0	0	0

Comments:

- ¹⁾ Samples come from the BIP's samplings as well as the storage places
- ²⁾ Samples come from the Border Inspection Post's samplings as well as from the official inspections performed at the storage places. It concerns specifically fish of the Scombridae, Clupeidae, Engraulidae, Coryfenidae, Pomatomidae and Scombresosidae species.

Footnote:

Samples come from the Border Inspection Post's samplings as well as from the official inspections performed at the storage places. It concerns specifically fish of the Scombridae, Clupeidae, Engraulidae, Coryfenidae, Pomatomidae and Scombresosidae species.

4.3 STAPHYLOCOCCAL ENTEROTOXINS

4.3.1 General evaluation of the national situation

A. Staphylococcal enterotoxins general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

4.3.2 Staphylococcal enterotoxins in foodstuffs

A. Staphylococcal enterotoxins in foodstuffs

Monitoring system

Sampling strategy

NO DATA AVAILABLE

Table Staphylococcal enterotoxins in food

	Source of information	Sampling unit	Sample weight	Units tested	Total units positive for Staphylococcal enterotoxins
Cheeses made from sheep's milk - hard ¹⁾	Veterinary Services, LCFAO	Batch	250gr	20	0
Dairy products (excluding cheeses) - milk powder and whey powder ²⁾	Veterinary Services, LCFAO	Single	10gr	1	0

Comments:

¹⁾ Final product on storage

²⁾ Final product on storage

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, epidemiological investigations and reporting of foodborne outbreaks

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

Table Foodborne Outbreaks: summarised data

	Number of outbreaks	Human cases	Hospitalized	Deaths	Strong evidence Number of Outbreaks	Total number of outbreaks
Salmonella - S. Typhimurium	0	unknown	unknown	unknown	0	0
Salmonella - S. Enteritidis	0	unknown	unknown	unknown	0	0
Salmonella - Other serovars	0	unknown	unknown	unknown	0	0
Campylobacter	0	unknown	unknown	unknown	0	0
Listeria - Listeria monocytogenes	0	unknown	unknown	unknown	0	0
Listeria - Other Listeria	0	unknown	unknown	unknown	0	0
Yersinia	0	unknown	unknown	unknown	0	0
Escherichia coli, pathogenic -	0	unknown	unknown	unknown	0	0
Bacillus - B. cereus	0	unknown	unknown	unknown	0	0
Bacillus - Other Bacillus	0	unknown	unknown	unknown	0	0
Staphylococcal enterotoxins	0	unknown	unknown	unknown	0	0
Clostridium - Cl. botulinum	0	unknown	unknown	unknown	0	0
Clostridium - Cl. perfringens	0	unknown	unknown	unknown	0	0
Clostridium - Other Clostridia	0	unknown	unknown	unknown	0	0
Other Bacterial agents - Brucella	0	unknown	unknown	unknown	0	0

	Number of outbreaks	Human cases	Hospitalized	Deaths	Strong evidence Number of Outbreaks	Total number of outbreaks
Other Bacterial agents - Shigella	0	unknown	unknown	unknown	0	0
Other Bacterial agents - Other Bacterial	0	unknown	unknown	unknown	0	0
Parasites - Trichinella	0	unknown	unknown	unknown	0	0
Parasites - Giardia	0	unknown	unknown	unknown	0	0
Parasites - Cryptosporidium	0	unknown	unknown	unknown	0	0
Parasites - Anisakis	0	unknown	unknown	unknown	0	0
Parasites - Other Parasites	0	unknown	unknown	unknown	0	0
Viruses - Norovirus	0	unknown	unknown	unknown	0	0
Viruses - Hepatitis viruses	0	unknown	unknown	unknown	0	0
Viruses - Other Viruses	0	unknown	unknown	unknown	0	0
Other agents - Histamine	0	unknown	unknown	unknown	0	0
Other agents - Marine biotoxins	0	unknown	unknown	unknown	0	0
Other agents - Other Agents	0	unknown	unknown	unknown	0	0
Unknown agent	0	unknown	unknown	unknown	0	0