ZOONOSES MONITORING

CYPRUS

The Report referred to in Article 5 of Directive 92/117/EEC

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

including information on foodborne outbreaks and antimicrobial resistance in zoonotic agents

IN 2004

INFORMATION ON THE REPORTING AND MONITORING SYSTEM

Country: **Cyprus**

Reporting Year: **2004**

Institutions and laboratories involved in monitoring:

Laboratory name	Description	Contribution
ANIMAL HEALTH AND WELFARE DIVISION. VETERINARY SERVICES MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT	Dr.CHRISTODOULOS PIPIS	REPORTING OFFICER MEMBER OF EFSA's ZOONOSES TASK FORCE
LABORATORY FOR THE CONTROL OF FOODS OF ANIMAL ORIGIN. VETERINARY SERVICES MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT	Dr. CHARALAMBOS KAKOYIANNIS	DATA ON FOOD
COMMUNICABI DISEASE NETWORK MINISTRY OF HEALTH	Dr.CHRISTALLA CHADJIANASTASIOU	DATA FOR HUMANS

ANIMAL HEALTH AND WELFARE DIVISION. VETERINARY SERVICES MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT	Dr.SAVVAS SAVVA	BOVINE TUBERCULOSIS DATA
ANIMAL HEALTH AND WELFARE DIVISION VETERINARY SERVICES MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT	DR. ANTONIS DEMETRIOU	DATA ON SALMONELLA IN POULTRY
SEROLOGY-BACTERIOLOGY LABORATORY VETERINARY SERVICES MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT	Dr.LIAPI MARIA	DATA ON BRUCELLOSIS LABORATORY TESTING

ANIMAL HEALTH AND WELFARE DIVISION. VETERINARY SERVICES MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT	Dr.G MPARGOULI	ANIMAL BRUCELLOSIS
PATHOLOGY - PARASITOLOGY - BACTERIOLOGY LABORATORY VETERINARY SERVICES MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT	Dr.IOANNIS IOANNOU	DATA ON FEEDINGSTUFF

PREFACE

This report is submitted to the European Commission in accordance with Article 5 of Council Directive 92/117/EEC[1]. 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 2004. 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.

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[1] Council Directive 92/117/ECC of 17 December 1992 concerning measures for protection against specified zoonoses and specified zoonotic agents in animals and products of animal origin in order to prevent outbreaks of foodborne infections and intoxications, OJ L 62, 15.3.1993, p. 38

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1. ANIMAL POPULATIONS

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

A. Information on susceptible animal population

Sources of information:

The information furnished derives from the Veterinary Services' database

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

The numbers represent the number of animals at the end of 2004

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

The animal population is allocated as follows:
Bovine Herds:
67 Herds with 1-5 animals, 28 herds with 6-10 animals, 18 herds with 11-25 animals, 13 herds with 26-50 animals, 29 herds with 51-100 animals, 90 herds with 101-200 animals, 53 herds with 201-300 animals and 72 herds with more than 301 animals.
The respective number of sheep and Goat flocks is 81 with 1-5 animals,131 with 6-10 animals,362 with 11-25 animals,438 with 26-50 animals, 574 with 51-100 animals,596 with 101-200 animals,395 with 201-300 animals and 1596 with >301 animals.
The Total number of bovine herds and Sheep and Goat flocks is 370 and 4173 respectively.
The Holdings at District level are
Bovine holdings:
53 in Ammochostos,
107 in Larnaka,
119 in Lefkosia,
36 in Lemesos and
55 in Paphos.
Sheep and Goat holdings:
610 in Ammochostos,
842 in Larnaka,
856 in Lefkosia,
953 in Lemesos and
912 in Paphos.
Total: Bovine holdings 370
Sheep and Goat holdings 4173

Table 14.1 Susceptible animal populations: number of herds and holdings rearing animals

* Only if different than current reporting year

Animal species	Category of animals	Number of herds or flocks	Year*	Number of holdings	Year*
Cattle (bovine animals)	dairy cows and heifers	345		345	
	meat production animals	25		25	
	in total	370		370	
Ducks	meat production animals			3	
Gallus gallus	parent birds - in total	23		19	
	broilers			150	
	laying hens	83		32	
	parent birds for meat production line	19			
	parent birds for egg production line	4			
Pigs	sows and gilts	111		111	
	fattening pigs	2		2	
	breeding animals	2		2	
	in total	115		115	
Sheep and goats	in total	4173		4173	

Table 14.2 Susceptible animal populations: number of animals

* Only if different than current reporting year

Animal species	Category of animals	Livestock numbers (live animals)	Year*	Number of slaughtered animals	Year*
Cattle (bovine animals)	calves (under 1 year) (1)	20302		10395	
	dairy cows and heifers	39842		6361	
	meat production animals	2057			
	in total	62201			
Ducks	meat production animals	66540		70020	
	in total	66540		70020	
Gallus gallus	parent birds - in total	223724			
	broilers	16569000		15911000	
	laying hens	415000			
	parent birds for meat production line	212453			
	parent birds for egg production line	11711			
Goats	animals over 1 year (2)	243158		26698	
	animals under 1 year (3)	66517		151056	
	in total	309675		177754	
Pigs	sows and gilts	47359		15677	
	breeding animals	4143			
	fattening pigs	416810		666522	
	in total	468314		682199	
Sheep	animals over 1 year (4)	187540		14013	
	animals under 1 year (lambs) (5)	55386		98254	
	in total	242926		112267	
Turkeys	meat production animals	114400		113570	

(1): The information on slaughtered animals refers to animals of <2 and >2 years of age instead of the respective information reffered to <1 and >1 year of age.
(2): The information on slaughtered animals refers to animals of <2 and >2 years of age instead of the respective information reffered to <1 and >1 year of age.
(3): The information on slaughtered animals refers to animals of <2 and >2 years of age instead of the respective information reffered to <1 and >1 year of age.
(4): The information on slaughtered animals refers to animals of <2 and >2 years of age instead of the respective information reffered to <1 and >1 year of age.
(5): The information on slaughtered animals refers to animals of <2 and >2 years of age instead of the respective information reffered to <1 and >1 year of age.

2. INFORMATION ON SPECIFIC ZOONOSES AND ZOONOTIC AGENTS

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

2.1. SALMONELLOSIS

2.1.1. General evaluation of the national situation

A. General evaluation

History of the disease and/or infection in the country

Over the last years a surveilance program was applied by the Veterinary Services covering the poultry sector.
Foods of animal origin were 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.

Recent actions taken to control the zoonoses

Culling of positive flocks of laying hens was applied, in combination with the destruction of the infected eggs originating from the relevant holdings.

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

Table 3.4.1.A Salmonellosis in man - species/serotype distribution

	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc	unknown status
Salmonella	89	12.43	89	12.43	0	0	0
S. Enteritidis	89	12.43	89	12.43			
S. Typhimurium	0	0	0	0			

Table 3.4.1.B Salmonellosis in man - age distribution

Age Distribution	S. Enteritidis			S. Typhimurium			Salmonella spp.		
	All	M	F	All	M	F	All	M	F
<1 year							9	7	2
1 to 4 years							31	16	15
5 to 14 years							22	9	14
15 to 24 years							7	3	4
25 to 44 years							2	1	1
45 to 64 years							6	1	5
65 years and older							3	2	1
Age unknown							8		
Total :	0	0	0	0	0	0	88	39	42

Table 3.4.2 Salmonellosis in man - seasonal distribution

Month	S. Enteritidis	S. Typhimurium	Salmonella spp.
	Cases	Cases	Cases
January	2		
February	0		
March	2		
April	5		
May	19		
June	9		
July	15		
August	13		
September	11		
October	9		
November	3		
December	1		
not known			
Total :	89	0	0

2.1.3. Salmonella in foodstuffs

A. Salmonella spp in eggs and egg products

Monitoring system

Sampling strategy

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

Eggs at egg packing centres (foodstuff based approach)

NO DATA AVAILABLE

Eggs at retail

NO DATA AVAILABLE

Raw material for egg products (at production plant)

NO DATA AVAILABLE

Egg products (at production plant and at retail)

NO DATA AVAILABLE

Definition of positive finding

Eggs at egg packing centres (foodstuff based approach)

NO DATA AVAILABLE

Eggs at retail

NO DATA AVAILABLE

Raw material for egg products (at production plant)

NO DATA AVAILABLE

Egg products (at production plant and at retail)

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

B. Salmonella spp. in broiler meat and products thereof

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Definition of positive finding

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

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 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

D. Salmonella spp. in pig meat and products thereof

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Definition of positive finding

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

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 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

Table 3.3.1 Salmonella sp. in meat and meat products (Part A)

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	Units positive	S. Enteritidis	S. Typhimurium	S. Montevideo	S. Braenderup	S. Newport	S. Kaapstad	S. Hadar	S. Blockley	S. Chester	S. group B	Salmonella spp.	S. Anatum	S. group C2	S. group O:53-59
Bovine meat																				
meat products																				
non-ready-to-eat																				
- at processing plant	VET INSP.		BATCH OF FIVE UNITS	25g	66	0														
Pig meat																				
fresh																				
- at processing plant	VET INSP.		BATCH OF FIVE UNITS	25g	73	1			1											
meat products																				
non-ready-to-eat																				
- at processing plant	VET INSP.		BATCH OF FIVE UNITS	25g	340	0														
Broiler meat																				
fresh																				
- at processing plant	VET INSP.		BATCH OF FIVE UNITS	25g	134	49	3	1	0	3	8	2	8	7	1	1	4	0	5	1
minced meat																				
- at processing plant	VET INSP.		BATCH OF FIVE UNITS	25g	26	1														
meat products																				
non-ready-to-eat																				
- at processing plant	VET INSP.		BATCH OF FIVE UNITS	25g	22	2							1	1						

Mixed meat																				
minced meat																				
- at processing plant	VET INSP.		BATCH OF FIVE UNITS	25g	26	1												1		

Footnote

The samples derive from the regular meat inpsections which are performed by the District Veterinary Offices; VET INSP. - Veterinary Inspections
The epidemiological unit of the meat or meat product sample consist of testing five subsamples of 25 g for each meat or meat product

Table 3.3.1 Salmonella sp. in meat and meat products (Part B)

	S. group C1	S. group D1
Bovine meat		
meat products		
non-ready-to-eat		
- at processing plant		
Pig meat		
fresh		
- at processing plant		
meat products		
non-ready-to-eat		
- at processing plant		
Broiler meat		
fresh	3	2
- at processing plant		
minced meat		
- at processing plant		
meat products		
non-ready-to-eat		
- at processing plant		
Mixed meat		
minced meat		
- at processing plant		

Footnote

The samples derive from the regular meat inpsections which are performed by the District Veterinary Offices.
The epidemiological unit of the meat or meat product sample consist of testing five subsamples of 25 g for each meat or meat product.

Table 3.3.2 Salmonella sp. in other food

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	Units positive	S. Enteritidis	S. Typhimurium	S. Braenderup	S. Gozo	Salmonella spp.	S. Hadar
cow milk												
raw	Veterinary inspections		PLASTIC BOTTLES OF 30 ML	25 ml	44	1				1		
Dairy products												
ready-to-eat	Veterinary inspections		BATCH OF FIVE UNITS	25g	1196	0						
Table eggs												
- at packing centre	Veterinary inspections		BATCH OF 12 EGGS	25 g	604	2			1			1
Fishery products												
fish	Veterinary inspections		BATCH OF FIVE UNITS	25g	196	0						

2.1.4. Salmonella in animals

A. Salmonella spp. in Gallus gallus - breeding flocks for egg production and flocks of laying hens

Monitoring system

Sampling strategy

Laying hens 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: Production period

NO DATA AVAILABLE

Laying hens: Day-old chicks

NO DATA AVAILABLE

Laying hens: Rearing period

NO DATA AVAILABLE

Laying hens: Production period

NO DATA AVAILABLE

Laying hens: Before slaughter at farm

NO DATA AVAILABLE

Laying hens: At slaughter

NO DATA AVAILABLE

Eggs at packing centre (flock based approach)

NO DATA AVAILABLE

Case definition

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

Laying hens: Day-old chicks

NO DATA AVAILABLE

Laying hens: Rearing period

NO DATA AVAILABLE

Laying hens: Production period

NO DATA AVAILABLE

Laying hens: Before slaughter at farm

NO DATA AVAILABLE

Laying hens: At slaughter

NO DATA AVAILABLE

Eggs at packing centre (flock based approach)

NO DATA AVAILABLE

Vaccination policy

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

NO DATA AVAILABLE

Laying hens 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

Laying hens 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

Laying hens 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 (separate elite, grand parent and parent flocks when necessary)

NO DATA AVAILABLE

Laying hens 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

B. Salmonella spp. in Gallus gallus - breeding flocks for meat production and broiler flocks

Monitoring system

Sampling strategy

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

NO DATA AVAILABLE

Broiler 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: Production period

NO DATA AVAILABLE

Broiler flocks: Day-old chicks

NO DATA AVAILABLE

Broiler flocks: Rearing period

NO DATA AVAILABLE

Broiler flocks: Before slaughter at farm

NO DATA AVAILABLE

Broiler flocks: At slaughter (flock based approach)

NO DATA AVAILABLE

Case definition

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

Broiler flocks: Day-old chicks

NO DATA AVAILABLE

Broiler flocks: Rearing period

NO DATA AVAILABLE

Broiler flocks: Before slaughter at farm

NO DATA AVAILABLE

Broiler 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

Broiler flocks

NO DATA AVAILABLE

Other preventive measures than vaccination in place

Broiler 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

Broiler 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 (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

Broiler flocks: Day-old chicks

NO DATA AVAILABLE

Broiler flocks: Rearing period

NO DATA AVAILABLE

Broiler flocks: Before slaughter at farm

NO DATA AVAILABLE

Broiler flocks: At slaughter (flock based approach)

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 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

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

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

D. Salmonella spp in geese - breeding flocks and meat production flocks

Monitoring system

Sampling strategy

Breeding flocks

NO DATA AVAILABLE

Type of specimen taken

Imported feed material of animal origin

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

Meat production flocks: At slaughter (flock based approach)

NO DATA AVAILABLE

Case definition

Breeding flocks: Day-old chicks

NO DATA AVAILABLE

Breeding flocks: Rearing period

NO DATA AVAILABLE

Breeding flocks: Production period

NO DATA AVAILABLE

Meat production flocks: Day-old chicks

NO DATA AVAILABLE

Meat production flocks: Rearing period

NO DATA AVAILABLE

Meat production flocks: Before slaughter at farm

NO DATA AVAILABLE

Meat production flocks: At slaughter (flock based approach)

NO DATA AVAILABLE

Vaccination policy

Breeding flocks

NO DATA AVAILABLE

Meat production flocks

NO DATA AVAILABLE

Other preventive measures than vaccination in place

Breeding flocks

NO DATA AVAILABLE

Meat production flocks

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

Breeding flocks

NO DATA AVAILABLE

Meat production flocks

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

Breeding flocks

NO DATA AVAILABLE

Meat Production flocks

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

E. 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

F. 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

G. 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

Table 3.2.1 Salmonella sp. in Poultry breeding flocks (Gallus gallus)

	Source of information	Remarks	Epidemiological unit	Flocks tested	Flocks positive	S. Enteritidis	S. Typhimurium	S. Agona	S. Essen
Gallus gallus									
parent breeding flocks for egg production line									
- during production period	Veterinary Inspections		FLOCK	5	0	0	0	0	0
parent breeding flocks for meat production line									
day-old chicks	Veterinary Inspections		FLOCK	2	1	0	0	1	0
- during rearing period	Veterinary Inspections		FLOCK	1	0	0	0	0	0
- during production period	Veterinary Inspections		FLOCK	28	2	1	0	0	1

Table 3.2.2 Salmonella sp. in other commercial poultry

	Source of information	Remarks	Epidemiological unit	Flocks tested	Flocks positive	S. Enteritidis	S. Typhimurium	S. Essen	S. Anatum	S. Montevideo	S. Pomona	S. Senftenberg	S. Newport	S. Nanga	S. Braenderup	Salmonella spp.
Gallus gallus																
laying hens				0	0	0	0	0	0	0	0	0	0	0	0	0
day-old chicks				5	0	0	0	0	0	0	0	0	0	0	0	0
- during rearing period				70	9	3	0	0	0	1	0	0	1	1	3	0
- during production period																
broilers																
day-old chicks				10	1	0	0	1	0	0	0	0	0	0	0	0
- during rearing period				208	50	2	1	7	10	10	10	10	0	0	0	0
Ducks																
- during production period				1	0	0	0	0	0	0	0	0	0	0	0	0
Turkeys																
- during production period				16	0	0	0	0	0	0	0	0	0	0	0	0

Table 3.2.3 Salmonella sp. in non-commercial poultry and birds

	Source of information	Remarks	Epidemiological unit	Flocks tested	Flocks positive	S. Enteritidis	S. Typhimurium	Not typeable	S. Derby	S. Newport
Pigeons				1	1	0	0	1	0	0
Guinea fowl				0	0	0	0	0	0	0
Quails				2	2	0	0	0	1	1
Pheasants				1	0	0	0	0	0	0
Partridges				4	1	0	0	1	0	0
Ostriches				18	0	0	0	0	0	0

Table 3.2.4 Salmonella sp. in animals (non poultry)

	Source of information	Remarks	Epidemiological unit	Units tested	Units positive	S. Enteritidis	S. Typhimurium
Cattle (bovine animals)				0	0	0	0
Sheep				0	0	0	0
Goats				0	0	0	0
Pigs							
breeding animals				0	0	0	0
fattening pigs				0	0	0	0
unspecified				0	0	0	0
Solipeds				0	0	0	0

2.1.5. Salmonella in feedstuffs

Table 3.1.1 Salmonella sp. in feed material of animal origin

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	Units positive	S. Enteritidis	S. Typhimurium
Feed material of land animal origin								
Meat meal				25 g	2	0		
Poultry offal meal				25 g	2	0		
Feed material of marine animal origin								
Fish meal				25 g	42	0		
Fish oil				25 g	9	0		
Fish silage				25 g	26	0		

Table 3.1.2 Salmonella sp. in feed of vegetable origin

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	Units positive	S. Enteritidis	S. Typhimurium
Feed material of cereal grain origin								
Wheat derived				25 g	3	0		
Feed material of oil seed or fruit origin								
Soya (bean) derived				25 g	34	0		
Sunflower seed derived				25 g	9	0		
Linseed derived				25 g	3	0		
other feed material								
Other plants				25 g	1	0		

Table 3.1.3 Salmonella sp. in compound feedingstuff

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	Units positive	S. Enteritidis	S. Typhimurium	Salmonella spp.	S. Braenderup
Compound feedingstuffs for pigs										
Final product			1	25 g	11	0				
Pet food										
Dog snacks (pig ears, chewing bones)			1	25g	40	3			1	2

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 3.3.3 Salmonella serovars in animals

Serovars		Cattle (bovine animals)		Pigs		Gallus gallus		Other poultry	
Sources of isolates		M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)
Number of isolates in the laboratory	N=	0	0	0	0	0	0	0	0
Number of isolates serotyped	N=	0	0	0	0	0	0	0	0

Footnote

(*) M : Monitor, C : Clinical
NO SURVEILLANCE PROGRAMS ARE IN PLACE.NO DATA AVAILABLE.

Table 3.3.4 Salmonella serovars in food

Serovars		Bovine meat		Pig meat		Broiler meat		Other poultry		Other products of animal origin	
Sources of isolates		M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)
Number of isolates in the laboratory	N=	0	0	0	0	0	0	0	0	0	0
Number of isolates serotyped	N=	0	0	0	0	0	0	0	0	0	0

Footnote

(*) M : Monitor, C : Clinical
NO DATA AVAILABLE.

Table 3.3.5 S.Enteridis phagetypes in animals

Phagetype		Cattle (bovine animals)		Pigs		Gallus gallus		Other poultry	
Sources of isolates		M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)
Number of isolates in the laboratory	N=	0	0	0	0	0	0	0	0
Number of isolates serotyped	N=	0	0	0	0	0	0	0	0

Footnote

(*) M : Monitor, C : Clinical
NO DATA AVAILABLE

Table 3.3.6 S.Enteridis phagetypes in food

Phagetype		Bovine meat		Pig meat		Broiler meat		Other poultry		Other products of animal origin	
Sources of isolates		M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)
Number of isolates in the laboratory	N=	0	0	0	0	0	0	0	0	0	0
Number of isolates serotyped	N=	0	0	0	0	0	0	0	0	0	0

Footnote

(*) M : Monitor, C : Clinical
NO DATA AVAILABLE

Table 3.3.9 S. Enteritidis phagetypes in humans

Phagetype		humans	
Sources of isolates		M(*)	C(*)
Number of isolates in the laboratory	N=	0	0
Number of isolates serotyped	N=	0	0

Footnote

(*) M : Monitor, C : Clinical
NO DATA AVAILABLE.

Table 3.3.7 Salmonella Typhimurium phagetypes in animals

Phagetype		Cattle (bovine animals)		Pigs		Gallus gallus		Other poultry	
Sources of isolates		M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)
Number of isolates in the laboratory	N=	0	0	0	0	0	0	0	0
Number of isolates serotyped	N=	0	0	0	0	0	0	0	0

Footnote

(*) M : Monitor, C : Clinical
NO DATA AVAILABLE

Table 3.3.8 Salmonella Typhimurium phagetypes in food

Phagetype		Bovine meat		Pig meat		Broiler meat		Other poultry		Other products of animal origin	
Sources of isolates		M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)	M(*)	C(*)
Number of isolates in the laboratory	N=	0	0	0	0	0	0	0	0	0	0
Number of isolates serotyped	N=	0	0	0	0	0	0	0	0	0	0

Footnote

(*) M : Monitor, C : Clinical
NO DATA AVAILABLE

Table 3.3.10 S. Typhimurium phagetypes in humans

Phagetype		humans	
Sources of isolates		M(*)	C(*)
Number of isolates in the laboratory	N=	0	0
Number of isolates serotyped	N=	0	0

Footnote

(*) M : Monitor, C : Clinical
NO DATA AVAILABLE.

2.1.7. Antimicrobial resistance in *Salmonella* isolates

Antimicrobial resistance is the ability of certain microorganisms to survive or grow in the presence of a given concentration of antimicrobial agent that usually would kill or inhibit the microorganism species in question. Antimicrobial resistant Salmonella strains may be transferred from animals or foodstuffs to humans.

A. Antimicrobial resistance in Salmonella in cattle

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

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 pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

C. Antimicrobial resistance in Salmonella in poultry

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

D. Antimicrobial resistance in Salmonella in foodstuff derived from cattle

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

E. Antimicrobial resistance in Salmonella in foodstuff derived from pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

F. Antimicrobial resistance in Salmonella in foodstuff derived from poultry

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Table 3.2.5.2 Antimicrobial susceptibility testing of S.Enteritidis in animals

	S. Enteritidis							
	Cattle (bovine animals)		**Pigs**		**Gallus gallus**		**Turkeys**	
Isolates out of a monitoring program	no		no		no		no	
Number of isolates available in the laboratory	0		0		0		0	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**
Tetracycline		0%		0%		0%		0%
Amphenicols								
Chloramphenicol		0%		0%		0%		0%
Florfenicol		0%		0%		0%		0%
Cephalosporin								
3rd generation cephalosporins		0%		0%		0%		0%
Fluoroquinolones								
Ciprofloxacin		0%		0%		0%		0%
Enrofloxacin		0%		0%		0%		0%
Quinolones								
Nalidixic acid		0%		0%		0%		0%
Trimethoprim		0%		0%		0%		0%
Sulfonamides								
Sulfonamide		0%		0%		0%		0%
Aminoglycosides								
Streptomycin		0%		0%		0%		0%
Gentamicin		0%		0%		0%		0%
Neomycin		0%		0%		0%		0%
Kanamycin		0%		0%		0%		0%
Trimethoprim + sulfonamides		0%		0%		0%		0%
Penicillins								
Ampicillin		0%		0%		0%		0%
Number of multiresistant isolates								
fully sensitives		0%		0%		0%		0%
resistant to 1 antimicrobial		0%		0%		0%		0%
resistant to 2 antimicrobials		0%		0%		0%		0%
resistant to 3 antimicrobials		0%		0%		0%		0%
resistant to 4 antimicrobials		0%		0%		0%		0%
resistant to >4 antimicrobials		0%		0%		0%		0%

Footnote

NO DATA AVAILABLE. NO SURVEILLANCE PROGRAM IS IN PLACE.

Table 3.2.7.6 Antimicrobial susceptibility testing of S. Enteritidis in humans - qualitative data

	S. Enteritidis	
	humans	
Isolates out of a monitoring program	no	
Number of isolates available in the laboratory	0	
Antimicrobials:	**N**	**%R**

Footnote

NO DATA AVAILABLE. NO SURVEILLANCE PROGRAM IS IN PLACE.

Table 3.2.5.3 Antimicrobial susceptibility testing of S.Typhimurium in animals

	S. Typhimurium							
	Cattle (bovine animals)		**Pigs**		**Gallus gallus**		**Turkeys**	
Isolates out of a monitoring program	no		no		no		no	
Number of isolates available in the laboratory	0		0		0		0	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**

Footnote

NO DATA AVAILABLE. NO SURVEILLANCE PROGRAM IS IN PLACE.

Table 3.2.7.7 Antimicrobial susceptibility testing of S. Typhimurium in humans - qualitative data

	S. Typhimurium	
	humans	
Isolates out of a monitoring program	no	
Number of isolates available in the laboratory	0	
Antimicrobials:	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 3.2.5.1 Antimicrobial susceptibility testing of Salmonella spp. in animals

	Salmonella spp.							
	Cattle (bovine animals)		**Pigs**		**Gallus gallus**		**Turkeys**	
Isolates out of a monitoring program	no		no		no		no	
Number of isolates available in the laboratory	0		0		0		0	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 3.2.5.5 Antimicrobial susceptibility testing of Salmonella spp. in food

	Salmonella spp.									
	Broiler meat		**Other poultry meat**		**Pig meat**		**Bovine meat**		**Egg products**	
Isolates out of a monitoring program	yes				yes				yes	
Number of isolates available in the laboratory	41				1				6	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**
Tetracycline	35	45.7%			1	0%			3	33%
Amphenicols										
Chloramphenicol	35	2.8%			1	0%			3	0%
Fluoroquinolones										
Ciprofloxacin	38	0%			1	0%			3	0%
Quinolones										
Nalidixic acid	35	5.7%			1	0%			3	0%
Sulfonamides										
Sulfonamide	35	17%							3	0%
Aminoglycosides										
Streptomycin	12	0%			1	0%			2	0%
Gentamicin	11	0%			1	0%			2	0%
Kanamycin	8	0%								
Trimethoprim + sulfonamides	14	0%			1	0%			2	0%
Penicillins										
Ampicillin	35	11.4%			1	0%				
Number of multiresistant isolates										
fully sensitives	16	45.7%			1	100%			2	66.6%
resistant to 1 antimicrobial	7	20%			0	0%			1	33.3%
resistant to 2 antimicrobials	12	34.2%								
resistant to 3 antimicrobials	0	0%								
resistant to 4 antimicrobials	0	0%								
resistant to >4 antimicrobials	0	0%								

Table 3.2.7.5 Antimicrobial susceptibility testing of Salmonella spp. in humans - qualitative data

	Salmonella spp.	
	humans	
Isolates out of a monitoring program	no	
Number of isolates available in the laboratory	0	
Antimicrobials:	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 3.2.6 Breakpoints for antibiotic resistance of Salmonella in Food

Test Method Used

- Disc diffusion
- Agar dilution
- Broth dilution
- E-test

Standards used for testing

- NCCLS
- CASFM

Subject to quality control

Salmonella	Standard for breakpoint	Breakpoint concentration (microg/ml)			Range tested concentration (microg/ml)		disk content	breakpoint Zone diameter (mm)		
		Susceptible <=	Intermediate	Resistant >	lowest	highest	microg	Susceptible >=	Intermediate	Resistant <=
Tetracycline							30	19		14
Amphenicols										
Chloramphenicol										
Florfenicol										
Fluoroquinolones										
Ciprofloxacin							5	21		15
Enrofloxacin										
Quinolones										
Nalidixic acid										
Trimethoprim										
Sulfonamides										
Sulfonamide										
Aminoglycosides										
Streptomycin										
Gentamicin										
Neomycin										
Kanamycin										
Trimethoprim + sulfonamides										
Cephalosporin										
3rd generation cephalosporins							30	21		13
Penicillins										
Ampicillin							10	17		13

Footnote

The lower and upper limit of the intermediate resistance category are the obtained results' values which lie between the susceptible and the resistant category limits.

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.

Table 6.3.A Campylobacteriosis in man - species/serotype distribution

	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc	unknown status
Campylobacter	0	0	0	0	0	0	0
C. coli(1)	0	0	0	0	0	0	0
C. jejuni	0	0	0	0	0	0	0
C. upsaliensis	0	0	0	0	0	0	0

(1) : NOT AVAILABLE DATA

Footnote

Campylobacteriosis was not a mandatory notifiable disease therefore no data are available.

Table 6.3.B Campylobacteriosis in man - age distribution

Age Distribution	C. coli			C. jejuni			Campylobacter spp.		
	All	M	F	All	M	F	All	M	F
<1 year	0	0	0	0	0	0	0	0	0
1 to 4 years	0	0	0	0	0	0	0	0	0
5 to 14 years	0	0	0	0	0	0	0	0	0
15 to 24 years	0	0	0	0	0	0	0	0	0
25 to 44 years	0	0	0	0	0	0	0	0	0
45 to 64 years	0	0	0	0	0	0	0	0	0
65 years and older	0	0	0	0	0	0	0	0	0
Age unknown									
Total :	0	0	0	0	0	0	0	0	0

Footnote

Campylobacteriosis was not a mandatory notifiable disease therefore there are no data available for 2004.

Table 6.3.C Campylobacteriosis in man - seasonal distribution

Month	C. coli	C. jejuni	C. upsaliensis	Campylobacter spp.
	Cases	Cases	Cases	Cases
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
not known	0	0	0	0
Total :	0	0	0	0

Footnote

Campylobacteriosis was not a mandatory notifiable disease therefore there are no data available for 2004.

2.2.3. Campylobacter in foodstuffs

A. Thermophilic Campylobacter in Broiler meat and products thereof

Monitoring system

Sampling strategy

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Definition of positive finding

At slaughterhouse and cutting plant

NO DATA AVAILABLE

At meat processing plant

NO DATA AVAILABLE

At retail

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

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 6.2 Thermophilic Campylobacter spp. in food

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	C. coli	C. lari	C. upsaliensis	C. jejuni	Campylobacter spp.
Poultry meat										
fresh										
- at slaughter			1	25	47					39
- at processing plant			1	25	47					22
Dairy products										
ready-to-eat			1	25	435	0	0	0	0	0

2.2.4. Campylobacter in animals

Table 6.1.1 Thermophilic Campylobacter spp. in animals

	Source of information	Remarks	Epidemiological unit	Units tested	Units positive	C. jejuni	C. coli	C. lari	C. upsaliensis
Cattle (bovine animals)									
dairy cows				0	0	0	0	0	0
others				0	0	0	0	0	0
Sheep				0	0	0	0	0	0
Goats				0	0	0	0	0	0
Pigs				0	0	0	0	0	0
Solipeds				0	0	0	0	0	0
Gallus gallus									
broilers									
- at farm				0	0	0	0	0	0
- at slaughter				0	0	0	0	0	0
Other poultry				0	0	0	0	0	0
Pet animals									
dogs				0	0	0	0	0	0
cats				0	0	0	0	0	0
Wildlife				0	0	0	0	0	0

Footnote

NO DATA AVAILABLE

2.2.5. Antimicrobial resistance in *Campylobacter* isolates

A. Antimicrobial resistance in Campylobacter jejuni and coli in cattle

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

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 pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

C. Antimicrobial resistance in Campylobacter jejuni and coli in poultry

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

E. Antimicrobial resistance in Campylobacter jejuni and coli in foodstuff

derived from pigs

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

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

Sampling strategy used in monitoring

Frequency of the sampling

NO DATA AVAILABLE

Type of specimen taken

NO DATA AVAILABLE

Methods of sampling (description of sampling techniques)

NO DATA AVAILABLE

Procedures for the selection of isolates for antimicrobial testing

NO DATA AVAILABLE

Methods used for collecting data

NO DATA AVAILABLE

Laboratory methodology used for identification of the microbial isolates

NO DATA AVAILABLE

Laboratory used for detection for resistance

Antimicrobials included in monitoring

NO DATA AVAILABLE

Breakpoints used in testing

NO DATA AVAILABLE

Preventive measures in place

NO DATA AVAILABLE

Control program/mechanisms

The control program/strategies in place

NO DATA AVAILABLE

Recent actions taken to control the zoonoses

NO DATA AVAILABLE

Suggestions to the Community for the actions to be taken

NO DATA AVAILABLE

Measures in case of the positive findings or single cases

NO DATA AVAILABLE

Notification system in place

NO DATA AVAILABLE

Results of the investigation

NO DATA AVAILABLE

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

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Additional information

NO DATA AVAILABLE

Table 6.1.2 Antimicrobial susceptibility testing of Campylobacter in animals

	Campylobacter spp.					
	Cattle (bovine animals)		**Pigs**		**Poultry**	
Isolates out of a monitoring program	no		no		no	
Number of isolates available in the laboratory	0		0		0	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 6.1.4 Antimicrobial susceptibility testing of Campylobacter in food

	Campylobacter spp.							
	Broiler meat		**Other poultry meat**		**Pig meat**		**Bovine meat**	
Isolates out of a monitoring program	no		no		no		no	
Number of isolates available in the laboratory	0		0		0		0	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 6.1.3 Antimicrobial susceptibility testing of Campylobacter in humans

	Campylobacter spp.	
	humans	
Isolates out of a monitoring program	no	
Number of isolates available in the laboratory	0	
Antimicrobials:	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 6.1.6 Breakpoints used for antimicrobial susceptibility testing of Campylobacter in Animals

Test Method Used

Disc diffusion
Agar dilution
Broth dilution
E-test

Standards used for testing

NCCLS
CASFM

Subject to quality control

Campylobacter	Standard for breakpoint	Breakpoint concentration (microg/ml)			Range tested concentration (microg/ml)		disk content	breakpoint Zone diameter (mm)		
		Susceptible <=	Intermediate	Resistant >	lowest	highest	microg	Susceptible >=	Intermediate	Resistant <=
Tetracycline										
Fluoroquinolones										
Ciprofloxacin										
Quinolones										
Nalidixic acid										
Aminoglycosides										
Gentamicin										
Macrolides										
Erythromycin										
Penicillins										
Ampicillin										

Footnote

NO DATA AVAILABLE.

Table 6.1.6 Breakpoints used for antimicrobial susceptibility testing of Campylobacter in Humans

Test Method Used

Disc diffusion
Agar dilution
Broth dilution
E-test

Standards used for testing

NCCLS
CASFM

Subject to quality control

Campylobacter	Standard for breakpoint	Breakpoint concentration (microg/ml)			Range tested concentration (microg/ml)		disk content	breakpoint Zone diameter (mm)		
		Susceptible <=	Intermediate	Resistant >	lowest	highest	microg	Susceptible >=	Intermediate	Resistant <=
Tetracycline										
Fluoroquinolones										
Ciprofloxacin										
Quinolones										
Nalidixic acid										
Aminoglycosides										
Gentamicin										
Macrolides										
Erythromycin										
Penicillins										
Ampicillin										

Footnote

NO DATA AVAILABLE

2.3. LISTERIOSIS

2.3.1. General evaluation of the national situation

A. Listeriosis general evaluation

History of the disease and/or infection in the country

NO DATA AVAILABLE

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

NO DATA AVAILABLE

Relevance of the findings in animals, feedingstuffs and foodstuffs to human cases (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 MICOBIOLOGY LABORATORY CRITERIA

Notification system in place

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

History of the disease and/or infection in the country

NOT APPLICABLE

Results of the investigation

NOT APPLICABLE

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

NOT APPLICABLE

Relevance as zoonotic disease

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

Table 7.2.A Listeriosis in man - species/serotype distribution

	Cases	Cases Inc
Listeria	0	0
Listeria spp.	0	0
congenital cases	0	0
deaths	0	0

Footnote

Listeriosis was not a mandatory notifible disease and therefore no data are available for 2004.

Table 7.2.B Listeriosis in man - age distribution

Age Distribution	L. monocytogenes			Listeria spp.		
	All	M	F	All	M	F
<1 year	0	0	0	0	0	0
1 to 4 years	0	0	0	0	0	0
5 to 14 years	0	0	0	0	0	0
15 to 24 years	0	0	0	0	0	0
25 to 44 years	0	0	0	0	0	0
45 to 64 years	0	0	0	0	0	0
65 years and older	0	0	0	0	0	0
Age unknown	0	0	0	0	0	0
Total :	0	0	0	0	0	0

Footnote

Listeriosis was not a mandatory notifible disease and therefore no data are available for 2004.

2.3.3. Listeria in foodstuffs

Table 7.1 Listeria monocytogenes in food

	Source of information	Remarks	Epidemiological unit	Sample weight	Definition used	Units tested	<100 cfu/g	>100 cfu/g	L. monocytogenes
Pig meat									
meat products									
ready-to-eat									
- at processing plant	Veterinary Inspections		BATCH OF FIVE UNITS	25g		340			2
Dairy products									
other products									
ready-to-eat									
- at processing plant	Veterinary Inspections		BATCH OF FIVE UNITS	25g		1190			15
Fishery products									
other									
- at processing plant - environmental sample	Veterinary Inspections		BATCH OF FIVE UNITS	25g		184			6

2.4. VEROCYTOTOXIC ESCHERICHIA COLI

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. Verocytotoxic Escherichia coli in humans

A. Verotoxigenic Escherichia coli infections in humans

Reporting system in place for the human cases

YES, SINCE JANUARY 2005 FOLLOWING AMENDMENT OF THE LEGISLATION

Case definition

EU RECOMMENDED CASE DEFINITION

Diagnostic/analytical methods used

EU RECOMMENDED MICROBIOLOGY LABORATORY DIAGNOSIS

Notification system in place

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

History of the disease and/or infection in the country

NOT APPLICABLE

Results of the investigation

NOT APPLICABLE

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

NOT APPLICABLE

Relevance as zoonotic disease

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

Table 11.3.A Verocytotoxic Escherichia coli infections in man - species/serotype distribution

Pathogenic Escherichia coli	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc
HUS	0	0	0	0	0	0
- clinical cases	0	0	0	0	0	0
- lab. confirmed cases	0	0	0	0	0	0
- caused by O157 (VT+)	0	0	0	0	0	0
- caused by other VTEC	0	0	0	0	0	0
E.coli infect. (except HUS)	0	0	0	0	0	0
- laboratory confirmed	0	0	0	0	0	0
- caused by 0157 (VT+)	0	0	0	0	0	0
- caused by other VTEC	0	0	0	0	0	0

Footnote

EHEC has been declared as a mandatory notifiable disease as of Januay 2005.Therefore no data for the year 2004 exist.

Table 11.3.B Verocytotoxic Escherichia coli infections in man - age distribution

Age Distribution	Verotoxigenic E. coli (VTEC)			VTEC O 157:H7			VTEC non-O 157		
	All	M	F	All	M	F	All	M	F
<1 year	0	0	0	0	0	0	0	0	0
1 to 4 years	0	0	0	0	0	0	0	0	0
5 to 14 years	0	0	0	0	0	0	0	0	0
15 to 24 years	0	0	0	0	0	0	0	0	0
25 to 44 years	0	0	0	0	0	0	0	0	0
45 to 64 years	0	0	0	0	0	0	0	0	0
65 years and older	0	0	0	0	0	0	0	0	0
Age unknown									
Total :	0	0	0	0	0	0	0	0	0

Footnote

EHEC has been declared as a mandatory notifiable disease as of Januay 2005.Therefore no data for the year 2004 exist.

2.4.3. Pathogenic Escherichia coli in foodstuffs

Table 11.2 Verocytotoxic Escherchia coli in food

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	Units positive	VTEC O 157	VTEC O 157:H7
cow milk								
raw	Veterinary Inspections		BATCH OF FIVE UNITS	25ml	38	0		
Dairy products	Veterinary Inspections		BATCH OF FIVE UNITS	25g	55	0		
Other milk								
raw	Veterinary Inspections		BATCH OF FIVE UNITS	25ml	32	0		
Wild game meat - birds								
minced meat	Veterinary Inspections		BATCH OF FIVE UNITS	25g	4	0		

2.4.4. Pathogenic Escherichia coli 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

Table 11.1 Verocytotoxic Escherchia coli in animals

	Source of information	Remarks	Epidemiological unit	Units tested	Units positive	VTEC O 157	VTEC O 157:H7
Cattle (bovine animals)							
calves (under 1 year)				0	0	0	0
meat production animals				0	0	0	0
dairy cows				0	0	0	0
unspecified				0	0	0	0
Sheep				0	0	0	0
Goats				0	0	0	0
Pigs				0	0	0	0
Solipeds				0	0	0	0
Poultry				0	0	0	0
Pet animals							
dogs				0	0	0	0
cats				0	0	0	0

2.5. TUBERCULOSIS

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 has 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 controlled by the Republic of Cyprus; thus regularly tested for TB. All slaughtered animals and their carcasses are necrotomicaly checked prior to be given to the meat industry for human consumption for possible presence of TB lesions
An island tuberculin test campaign began in 2004 according to Directive 64/432 provisions. 6931 animals were tested from 81 holdings of which none gave positive reaction. Two animals which reacted to the single intradermal test had finally proved to be negative after the conduction of the intradermal comparative test.

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

During 2004, 6931 animals were tested from 81 holdings of which none gave positive reaction. Two animals, which reacted to the single intradermal test, had proved to be negative after the conduction of the intradermal comparative test.

Recent actions taken to control the zoonoses

A national tuberculin test campaign has begun since August 2004 according to Directive 64/432 provisions. This program aims to examine all bovines over the age of six weeks.

2.5.2. Tuberculosis 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. THIS YEARS SINGLE CASE HAS BEEN AN IMPORTED ONE

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

Table 1.2.A Tuberculosis in man - species/serotype distribution

Mycobacterium	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc
	18	2.52	6	0.84	12	1.68
M. bovis	1	0.14			1	0.14
M. tuberculosis	17	2.38	6	0.84	11	1.54
reactivation of previous cases						
clinical case	12	1.68	1	0.14	11	1.54

Footnote

M. bovis case was an imported one.

Table 1.2.B Tuberculosis in man - age distribution

Age Distribution	M. bovis			M. tuberculosis		
	All	M	F	All	M	F
<1 year						
1 to 4 years						
5 to 14 years						
15 to 24 years					7	2
25 to 44 years					8	4
45 to 64 years					5	0
65 years and older		1			3	0
Age unknown						
Total :	0	1	0	0	23	6

Footnote

M. bovis case was an imported one

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

NOT OFFICIALLY

Free regions

NONE OFFICIALLY YET

Monitoring system

Sampling strategy

As prescribed in Annex A of the EU Directive 64/432/EK

Frequency of the sampling

A herd in order to be assigned the officially free status must undergo two tuberculin tests in a minimum of a six monthS interval.

Methods of sampling (description of sampling techniques)

As prescribed in Annex A of the EU Directive 64/432/EK

Case definition

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

Diagnostic/analytical methods used

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

Vaccination policy

NO VACCINATION IS APPLIED

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 Directive 64/432 provisions. The main objective of the program is to assign to bovine herds the Bovine Tuberculosis Officially Free Status.

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, movement restrictions are lifted following a negative test of 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 disease.
By law any occurence of the disease is obligatory notifiable to the Veterinary Services

Results of the investigation

No positive herds have been detected up to the moment.

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

In 2004, 6931 animals were tested from 81 holdings with negative results. Two animals which reacted to the simple intradermal test had finally reacted negatively to the comparative test.
No tuberculosis have been found in slaughtered animals.

B. Mycobacterium bovis in farmed deer

Monitoring system

Sampling strategy

Not applied as no farm deer exist in Cyrpus

Frequency of the sampling

Not applied

Methods of sampling (description of sampling techniques)

Not applied

Case definition

Not applied

Diagnostic/analytical methods used

Not applied

Vaccination policy

Not applied

Other preventive measures than vaccination in place

Not applied

Control program/mechanisms

The control program/strategies in place

Not applied

Recent actions taken to control the zoonoses

Not applied

Suggestions to the Community for the actions to be taken

Not applied

Measures in case of the positive findings or single cases

Not applied

Notification system in place

Not applied

Results of the investigation

Not applied

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

Not applied

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

Not applied

Additional information

Not applied

Table 1.1.3 Tuberculosis in animals

	Source of information	Remarks	Epidemiological unit	Units tested	Units positive	M. bovis	M. tuberculosis
Goats				0	0	0	0
Pigs				0	0	0	0
Zoo animals				0	0	0	0
Sheep				0	0	0	0

1.1.1 Bovine tuberculosis

MANDATORY	**CATTLE**		
Number of herds under official control:	341	Number of animals under official control:	59650
	OTF bovine herds	**OTF bovine herds with status suspended**	**Bovine herds infected with tuberculosis**
Status of herds at year end (a):	0	0	0
New cases notified during the year (b):			0
	Units tested	**Units suspected**	**Units positive**
Routine tuberculin test (c) - data concerning herds:	81	2	0
Routine tuberculin test (c) - data concerning animals:	6931	2	0
	Animals slaughtered	**Animals suspected**	**Animals positive**
Routine post-mortem examination (d):	10343	0	0
		Herds suspected	**Herds confirmed**
Follow up of suspected cases in post-mortem examination (e):		0	0
Follow-up investigation of suspected cases: trace, contacts (f):		0	0
	Animals tested	**Animals suspected**	**Animals positive**
Other routine investigations: exports (g):	0	0	0
Other routine investigations: tests at AI stations (h):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (i):	0	0	0
Animals slaughtered (j):	0	0	0
VOLUNTARY	**CATTLE**		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (k):	0	0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other investigations: farms at risk (l):	0	0	0
	Samples tested	***M. bovis*isolated**	
Bacteriological examination (m):	0	0	

1.1.1 Bovine tuberculosis - KYPROS / KIBRIS

MANDATORY	**CATTLE**		
Number of herds under official control:	341	Number of animals under official control:	59650
	OTF bovine herds	**OTF bovine herds with status suspended**	**Bovine herds infected with tuberculosis**
Status of herds at year end (a):	0	0	0
New cases notified during the year (b):		0	0
	Units tested	**Units suspected**	**Units positive**
Routine tuberculin test (c) - data concerning herds:	81	2	0
Routine tuberculin test (c) - data concerning animals:	6931	2	0
	Animals slaughtered	**Animals suspected**	**Animals positive**
Routine post-mortem examination (d):	10343	0	0
		Herds suspected	**Herds confirmed**
Follow up of suspected cases in post-mortem examination (e):		0	0
Follow-up investigation of suspected cases: trace, contacts (f):		0	0
	Animals tested	**Animals suspected**	**Animals positive**
Other routine investigations: exports (g):	0	0	0
Other routine investigations: tests at AI stations (h):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (i):	0	0	0
Animals slaughtered (j):	0	0	0
VOLUNTARY	**CATTLE**		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (k):	0	0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other investigations: farms at risk (l):	0	0	0
	Samples tested	***M. bovis*isolated**	
Bacteriological examination (m):	0	0	

1.1.2 Tuberculosis in farmed deer

MANDATORY	**FARMED DEER**		
Number of herds under official control:	0	Number of animals under official control:	0
	"OTF" herds	**"OTF" herds with status suspended**	**Herds infected with tuberculosis**
Status of herds at year end (a):	0	0	0
New cases notified during the year (b):	0	0	0
	Units tested	**Units suspected**	**Units positive**
Routine tuberculin test (c) - data concerning herds:	0	0	0
Routine tuberculin test (c) - data concerning animals:	0	0	0
	Animals slaughtered	**Animals suspected**	**Animals positive**
Routine post-mortem examination (d):	0	0	0
		Herds suspected	**Herds confirmed**
Follow up of suspected cases in post-mortem examination (e):		0	0
Follow-up investigation of suspected cases: trace, contacts (f):		0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other routine investigations: exports (g):	0	0	0
Other routine investigations: tests at AI stations (h):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (i):	0	0	0
Animals slaughtered (j):	0	0	0

VOLUNTARY	**FARMED DEER**		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (k):	0	0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other investigations: farms at risk (l):	0	0	0
	Samples tested	***M. bovis*isolated**	
Bacteriological examination (m):	0	0	

1.1.2 Tuberculosis in farmed deer - KYPROS / KIBRIS

MANDATORY	**FARMED DEER**		
Number of herds under official control:	0	Number of animals under official control:	0
	"OTF" herds	**"OTF" herds with status suspended**	**Herds infected with tuberculosis**
Status of herds at year end (a):	0	0	0
New cases notified during the year (b):	0	0	0
	Units tested	**Units suspected**	**Units positive**
Routine tuberculin test (c) - data concerning herds:	0	0	0
Routine tuberculin test (c) - data concerning animals:	0	0	0
	Animals slaughtered	**Animals suspected**	**Animals positive**
Routine post-mortem examination (d):	0	0	0
		Herds suspected	**Herds confirmed**
Follow up of suspected cases in post-mortem examination (e):		0	0
Follow-up investigation of suspected cases: trace, contacts (f):		0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other routine investigations: exports (g):	0	0	0
Other routine investigations: tests at AI stations (h):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (i):	0	0	0
Animals slaughtered (j):	0	0	0

VOLUNTARY	**FARMED DEER**		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (k):	0	0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other investigations: farms at risk (l):	0	0	0
	Samples tested	***M. bovis*isolated**	
Bacteriological examination (m):	0	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 2004, the prevalence and incidence of bovine, as well as, ovine and caprine brucellosis in Cyprus are decreasing.
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 2 new human cases of brucellosis during 2004. Both were owners of known infected farms.

Recent actions taken to control the zoonoses

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

2.6.2. Brucellosis in humans

A. Brucellosis in humans

Reporting system in place for the human cases

YES, SINCE 1983

Case definition

EU RECOMMENDED CASE DEFINITION SINCE JANUARY 2004

Diagnostic/analytical methods used

EU RECOMMENDED MICROBIOLOGY LABORATORY DIAGNOSTIC CRITERIA SINCE JANUARY 2004

Notification system in place

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

History of the disease and/or infection in the country

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

Relevance as zoonotic disease

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

Table 2.3.A Brucellosis in man - species/serotype distribution

Brucella	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc
	1	0.14	1	0.14	0	0
B. abortus						
B. melitensis	1	0.14	1	0.14		
B. suis						
occupational cases	1	0.14	1	0.14		

Table 2.3.B Brucellosis in man - age distribution

Age Distribution	B. abortus			B. melitensis			Brucella spp.		
	All	M	F	All	M	F	All	M	F
<1 year									
1 to 4 years									
5 to 14 years									
15 to 24 years									
25 to 44 years									
45 to 64 years									
65 years and older				1	1	0	1	1	0
Age unknown									
Total :	0	0	0	1	1	0	1	1	0

2.6.3. Brucella in foodstuffs

Table 2.2 Brucella sp. in food

	Source of information	Remarks	Epidemiological unit	Units tested	Units positive	B. melitensis	B. abortus	B. suis
cow milk								
raw				0	0	0	0	0
milk for manufacture				0	0	0	0	0
heat-treated				0	0	0	0	0
Dairy products				0	0	0	0	0

Footnote

NO DATA AVAILABLE

2.6.4. Brucella in animals

A. Brucella abortus in Bovine Animals

Status as officially free of bovine brucellosis during the reporting year

Free regions

Monitoring system

Frequency of the sampling

Vaccination policy

B. Brucella melitensis in Goat

Monitoring system

Type of specimen taken

Other:

Vaccination policy

Vaccination is prohibited

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

Monitoring system

Sampling strategy

At infected and suspected herds sampling is targeted.
Concenring 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 and fetuses (in case of abortion) from the seropositive animals in new outbreaks.
Non infected farms: Blood sampling of all animals over 12 months old once a year. Cultures from milk samples and fetuses from aborting animals.
Farms with less than 10 individuals over 12 months old: Blood sampling of all animals over 12 months old twice a year.

Type of specimen taken

Other: Blood, Milk, Fetuses

Methods of sampling (description of sampling techniques)

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

Case definition

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

Diagnostic/analytical methods used

All materials, reagents and procedures used are based to the relevant EEC legislation (Dir 91/68/EEC and 64/432/EEC) and the OIE Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees) 5th ed, 2004.
Bulk milk ELISA: Commercially available kits are used that fulfill the requirements of the references mentioned above. The procedures used are according to the manufacturers directions.
Rose Bengal test: 30 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.
Complement fixation test: Dilution of serum starts from ¼ until 1/256, sera are inactivated in water bath in tubes and then transferred to 96 well U micro plates. Warm fixation follows. All reagents are commercially purchased and each time the batch or the company changes titration of the reagents takes place. In each day test controls of complement, antigen, blood as well as positive and negative controls are used. Also, for each sample examined there is anticomplimentary control.
Isolation: On Brucella medium incubating in 37oC with and without CO2. Confirmation on the species level: Dye of the colony with Gram and Stamp. Culture on Mc Conkey agar (lactose fermentation) and Blood agar (Haemolysis).

Vaccination policy

VACCINATION IS PROHIBITED

Other preventive measures than vaccination in place

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

Control program/mechanisms

The control program/strategies in place

The bovine brucellosis eradication program is based on a test and extended slaughter or killing of positive animals or positive herds, implemented in the area controlled by the Veterinary Services of the Republic of Cyprus. The target population of the programme is

all bovine animals over 12 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 bovine brucellosis eradication program. The Director of the Veterinary Services is responsible for the coordination of the whole program. In 2003 and 2004 the EU has cofinanced the 50% of the programme. All the measures taken are according to Directive 64/432 EEC.

Recent actions taken to control the zoonoses

Application of brucellosis eradication programme.

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 Servises.
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 law (N. 109 (I)/2001).

Results of the investigation

Link to table 2.1.1.

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

According to the epidemiological data, from 2000 until the end of 2004, the prevalence and incidence of bovine brucellosis in Cyprus are decreasing.
Possible sources of infection in a herd are:
· the neighboring with known infected herds (most common)
· common use of machines
· illegal movements of animals from known infected herd

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

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

There were 2 new human cases of brucellosis during 2004. Both were owners of known infected farms.

Additional information

A percentage of 96% of the dairy farms is already negative in at least three successive bulk milk ELISA tests in intervals of three months.Serological examination of these farms started in June 2004, aiming their declaration as brucellosis officially free. Concerning the bovine farms, whose population is comprised exclusively with local breed animals, most of them have already had their animal population serologically examined twice, in time interval of at least six months, after which they have been declared as brucellosis officially free. By the end of 2004, 164 of bovine herds have been declared brucellosis officially free. The remaining herds are under the procedure of being granted the brucellosis officially free status.

D. B. melitensis in animal - Sheep and goats

Monitoring system

Sampling strategy

At infected and suspected herds sampling is targeted.
Concenring 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 6 months. Cultures from milk samples and fetuses (in case of abortion) from the seropositive animals in new outbreaks.
Non infected farms: Blood sampling of all animals over 6 months old twice a year. Cultures from milk samples and fetuses from aborting animals.

Type of specimen taken

Other: Blood, Milk, Fetuses

Methods of sampling (description of sampling techniques)

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

Case definition

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

Diagnostic/analytical methods used

All materials, reagents and procedures used are based to the relevant EEC legislation (Dir 91/68/EEC and 64/432/EEC) and the OIE Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees) 5th ed, 2004.
Individual Screening Test: Rose Bengal test. 30 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 ¼ until 1/256 is used, sera are inactivated in water bath in tubes and then transferred to 96 well U micro plates. Warm fixation follows. All reagents are commercially purchased and each time the batch or the company changes titration of the reagents takes place. In each day test controls of complement, antigen, blood as well as positive and negative controls are used. Also, for each sample examined there is anticomplimentary control.
Isolation: On Brucella medium incubating in 37 C with and without CO2. Confirmation on the species level: Dye of the colony with Gram and Stamp. Culture on Mc Conkey agar (lactose fermentation) and Blood agar (Haemolysis).

Vaccination policy

VACCINATION IS PROHIBITED

Other preventive measures than vaccination in place

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

Control program/mechanisms

The control program/strategies in place

The ovine and caprine brucellosis eradication program is based on a test and extended slaughter or killing of positive animals or positive flocks, implemented in the area controlled by the Veterinary Services of the Republic of Cyprus. The target population of the programme 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 2003 and 2004 the EU has cofinanced the 50% of the programme. All the measures taken are according to Directive 91/68 EEC.

Recent actions taken to control the zoonoses

Application of brucellosis eradication programme.

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 law (N. 109 (I)/2001).

Results of the investigation

Link to table 2.1.2.

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

According to the epidemiological data, from 2000 until the end of 2004, the prevalence and incidence of ovine and caprine brucellosis in Cyprus are decreasing.
Possible sources of infection in a flock are:
· the neighboring with known infected herds (most common)
· common use of machines
· illegal movements of animals from known infected herd
· sharing of pasture
· mechanical vectors (e.g. lorries of traders)

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

There were 2 new human cases of brucellosis during 2004.
Both were owners of known infected farms.

Additional information

A percentage of 40,9% of the flocks under the program have been declared brucellosis officially free by the end of the year 2004 according to Dir 91/68 EEC, Annex A (1,660 flocks). Many of

the remaining non-officially free flocks have completed the serological tests and are in the process of being evaluated to grant the status. Some flocks are to perform the second serological test for granting the status. Few flocks are in need of two serological tests to grant the status (flocks for which one year has passed from the day the first test was performed but a year passed without performing the second test).

Table 2.1.3 Brucellosis in animals

	Source of information	Remarks	Epidemiological unit	Units tested	Units positive	B. melitensis	B. abortus	B. suis
Pigs				0	0	0	0	0

Footnote

NO DATA AVAILABLE.

2.1.1 Bovine brucellosis

MANDATORY	CATTLE		
Number of herds under official control:	345	Number of animals under official control:	41899
	OBF bovine herds	**OBF bovine herds with status suspended**	**Bovine herds infected with brucellosis**
Status of herds at year end (a):	164	0	6
New cases notified during the year (b):	164	0	4
	Animals tested	**Animals suspected**	**Animals positive**
Notification of clinical cases, including abortions (c):	17	0	3
	Units tested	**Units suspected**	**Units positive**
Routine testing (d1) - data concerning herds:	345	0	7
Routine testing (d2) - number of animals tested:	41899	0	116
Routine testing (d3) - number of animals tested individually:	41858	0	116
		Herds suspected	**Herds confirmed**
Follow-up investigation of suspected cases: trace, contacts (e):		0	0
	Animals tested	**Animals suspected**	**Animals positive**
Other routine investigations: exports (f):	0	0	0
Other routine investigations: tests at AI stations (g):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (h):	116	116	0
Animals slaughtered (i):	116	116	0

VOLUNTARY	CATTLE		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (k):	0	0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other investigations: farms at risk (l):			
	Samples tested	**Brucella isolated**	
Bacteriological examination (m):	20	3	

2.1.1 Bovine brucellosis - KYPROS / KIBRIS

MANDATORY	CATTLE		
Number of herds under official control:	345	Number of animals under official control:	41899
	OBF bovine herds	**OBF bovine herds with status suspended**	**Bovine herds infected with brucellosis**
Status of herds at year end (a):	164	0	6
New cases notified during the year (b):	164	0	4
	Animals tested	**Animals suspected**	**Animals positive**
Notification of clinical cases, including abortions (c):	0	0	0
	Units tested	**Units suspected**	**Units positive**
Routine testing (d1) - data concerning herds:	345	7	7
Routine testing (d2) - number of animals tested:	41899	116	116
Routine testing (d3) - number of animals tested individually:	41858	116	116
		Herds suspected	**Herds confirmed**
Follow-up investigation of suspected cases: trace, contacts (e):			
	Animals tested	**Animals suspected**	**Animals positive**
Other routine investigations: exports (f):	0	0	0
Other routine investigations: tests at AI stations (g):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (h):	116	116	0
Animals slaughtered (i):	116	116	0

VOLUNTARY	CATTLE		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (k):	0	0	0
	Herds tested	**Herds suspected**	**Herds positive**
Other investigations: farms at risk (l):			
	Samples tested	**Brucella isolated**	
Bacteriological examination (m):	20	3	

2.1.2 Ovine and caprine brucellosis

MANDATORY	SHEEP AND GOATS		
Number of holdings under official control:	4059	Number of animals under official control:	506428
	OBF ovine and caprine holdings	**OBF ovine and caprine holdings with status suspended**	**OBF ovine and caprine holdings infected with brucellosis**
Status of herds at year end (a):	1660	3	21
New cases notified during the year (b):	1660	3	16
	Animals tested	**Animals suspected**	**Animals positive**
Notification of clinical cases, including abortions (c):	128	0	0
	Units tested	**Units suspected**	**Units positive**
Routine testing (d) - data concerning holdings:	4059	3	30
Routine testing (d) - data concerning animals:	506428	226	212
		Holdings suspected	**Holdings confirmed**
Follow-up investigation of suspected cases: trace, contacts (e):		3	0
	Animals tested	**Animals suspected**	**Animals positive**
Other routine investigations: exports (f):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (g):	3122	212	0
Animals slaughtered (h):	3122	212	0

VOLUNTARY	SHEEP AND GOATS		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (i):	0	0	0
	Holdings tested	**Holdings suspected**	**Holdings positive**
Other investigations: farms at risk (j):	0	0	0
	Samples tested	**Brucella isolated**	
Bacteriological examination (k):	184	22	

2.1.2 Ovine and caprine brucellosis - KYPROS / KIBRIS

MANDATORY	**SHEEP AND GOATS**		
Number of holdings under official control:	4059	Number of animals under official control:	506428
	OBF ovine and caprine holdings	**OBF ovine and caprine holdings with status suspended**	**OBF ovine and caprine holdings infected with brucellosis**
Status of herds at year end (a):	1660	3	21
New cases notified during the year (b):	1660	3	16
	Animals tested	**Animals suspected**	**Animals positive**
Notification of clinical cases, including abortions (c):	0	0	0
	Units tested	**Units suspected**	**Units positive**
Routine testing (d) - data concerning holdings:	4059		16
Routine testing (d) - data concerning animals:	506428	3122	212
		Holdings suspected	**Holdings confirmed**
Follow-up investigation of suspected cases: trace, contacts (e):		0	0
	Animals tested	**Animals suspected**	**Animals positive**
Other routine investigations: exports (f):	0	0	0
	All animals	**Positives**	**Contacts**
Animals destroyed (g):	3122	212	0
Animals slaughtered (h):	3122	212	0
VOLUNTARY	**SHEEP AND GOATS**		
	Animals tested	**Animals suspected**	**Animals positive**
Other investigations: imports (i):	0	0	0
	Holdings tested	**Holdings suspected**	**Holdings positive**
Other investigations: farms at risk (j):	0	0	0
	Samples tested	**Brucella isolated**	
Bacteriological examination (k):	184	22	

2.7. YERSINIOSIS

2.7.1. General evaluation of the national situation

A. Yersinia entercolitica 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. Yersinosis in humans

Reporting system in place for the human cases

YES SINCE JANUARY 2005

Case definition

EU RECOMMENDED CASE DEFINITION

Diagnostic/analytical methods used

EU RECOMMENDED LABORATORY CRITERIA FOR DIAGNOSIS

Notification system in place

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

History of the disease and/or infection in the country

NOT APPLICABLE

Results of the investigation

NOT APPLICABLE

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

NOT APPLICABLE

Relevance as zoonotic disease

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

Table 8.3.A Yersiniosis in man - species/serotype distribution

Yersinia	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc
	0	0	0	0	0	0
Y. enterocolitica						
Y. enterocolitica O:3						
Y. enterocolitica O:9						

Footnote

Yersiniosis Mandatory Notified Disease since January 2005 therefore no data are available for 2004.

Table 8.3.B Yersiniosis in man - age distribution

Age Distribution	Y. enterocolitica			Yersinia spp.		
	All	M	F	All	M	F
<1 year	0			0		
1 to 4 years	0			0		
5 to 14 years	0			0		
15 to 24 years	0			0		
25 to 44 years	0			0		
45 to 64 years	0			0		
65 years and older	0			0		
Age unknown	0			0		
Total :	0	0	0	0	0	0

Footnote

Yersiniosis Mandatory Notified Disease since January 2005 therefore no data are available for 2004.

Table 8.3.C Yersiniosis in man - seasonal distribution

Month	Y. enterocolitica	Yersinia spp.
	Cases	Cases
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	0	0
November	0	0
December	0	0
not known	0	0
Total :	0	0

Footnote

Yersiniosis Mandatory Notified Disease since January 2005 therefore no data are available for 2004.

2.7.3. Yersinia in foodstuffs

Table 8.2 Yersinia enterocolitica in food

	Source of information	Remarks	Epidemiological unit	Sample weight	Units tested	Units positive	Y. enterocolitica	Y. enterocolitica O:3	Y. enterocolitica O:9
Bovine meat									
fresh									
- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
meat products									
- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
Pig meat									
fresh									
- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
meat products									
- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
Poultry meat									
fresh									
- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
meat products									
- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
Other meat									
fresh									
- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
meat products									

- at slaughter	0	0	0	0	0	0	0	0	0
- at processing plant	0	0	0	0	0	0	0	0	0
- at retail	0	0	0	0	0	0	0	0	0
Other processed food products									
prepared dishes	0	0	0	0	0	0	0	0	0
cow milk									
raw	0	0	0	0	0	0	0	0	0
Dairy products	0	0	0	0	0	0	0	0	0
Fishery products	0	0	0	0	0	0	0	0	0

Footnote

NO DATA ARE AVAILABLE

2.7.4. Yersinia in animals

A. Yersinia entercolitica 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

Table 8.1 Yersinia enterocolitica in animals

	Source of information	Remarks	Epidemiological unit	Units tested	Y. enterocolitica	Y. enterocolitica O:3	Y. enterocolitica O:9
Cattle (bovine animals)				0	0	0	0
Sheep				0	0	0	0
Goats				0	0	0	0
Pigs				0	0	0	0
Solipeds				0	0	0	0
Poultry				0	0	0	0
Pet animals							
dogs				0	0	0	0
cats				0	0	0	0

Footnote

NO DATA ARE 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

The examination for Trichinella spiralis began in 1969 and since then a total number of 380480 samples from different animals had been tested. The samples derived mainly from swine and to a less extent from other animal species such as stray dogs, foxes, horses.
All samples which have been tested until today have been proved to be Trichinella free.

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

As of January 2004 the examination of raw swine meat is performed at the slaughterhouse's laboratories. During 2004 a total of 357638 samples, representing 80.7% of the target population, have been examined. The samples tested have also been proved to be Trichinella free.

2.8.2. Trichinellosis in humans

A. Trichinellosis 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 DIAGNOSTIC 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

BASED ON THE VETERINARY SITE SURVEILLANCE, WE DON'T EXPECT TO HAVE HUMAN CASES BESIDE IMPORTED CASES

Table 4.2.A Trichinellosis in man - species/serotype distribution

	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc
Trichinella	0	0	0	0	0	0
Trichinella spp.(1)	0	0	0	0	0	0

(1) : NOT AVAILABLE DATA

Footnote

Trichinella has recently been declared as mandatory notifiable communicable disease in humans as of January 2005.Therefore no data exist for 2004.

Table 4.2.B Trichinellosis in man - age distribution

Age Distribution	Trichinella spp.		
	All	M	F
<1 year	0	0	0
1 to 4 years	0	0	0
5 to 14 years	0	0	0
15 to 24 years	0	0	0
25 to 44 years	0	0	0
45 to 64 years	0	0	0
65 years and older	0	0	0
Age unknown	0	0	0
Total :	0	0	0

Footnote

Trichinella has recently been declared as mandatory notifiable communicable disease in humans as of January 2005.Therefore no data exist for 2004.

2.8.3. Trichinella in animals

A. Trichinella in pigs

Monitoring system

Sampling strategy

All swine carcasses are examined for the presence of Trichinella. The test is applied at the slaughterhouses and sampling is done according to the provisions set forth in Directive 77/96/EEC, Method VI, C.1.i and C.1.ii.

Frequency of the sampling

Other: All swine carcasses

Type of specimen taken

Diaphragm muscle

Methods of sampling (description of sampling techniques)

The sampling is done according to the provisions set forth in Directive 77/96/EEC, Method VI, c.1.i and c.1.ii

Case definition

The carcase is considered to be positive when Trichinella is detected.

Diagnostic/analytical methods used

Artificial digestion method of collective samples

Control program/mechanisms

The control program/strategies in place

A nationwide program is in place through which all swine carcasses are examined for the presence of Trichinella. The carcasse's examination for Trichinella is done according to the provisions set forth by the EU Directive 77/96/EK. Furthermore wild life animals are tested for Trichinella presence.

Notification system in place

The disease is notifiable

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

Cyprus is considered to be free from Trichinellosis.

Table 4.1 Trichinella in animals

	Source of information	Remarks	Epidemiological unit	Animals tested	Animals positive
Pigs	VETERINARY MEAT INSPECTION		SWINE CARCASSES	357638	0

2.9. ECHINOCOCCOSIS

2.9.1. General evaluation of the national situation

A. Echinococcus spp general evaluation

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

During 2004 the scheme which targets the control of Echinococcosis /Hydatidosis (E/H) has continued.
Within this scheme, 5426 dogs, originating from 77 villages, were preventively treated with Pranziquantel.
110372 ovines, 172022 caprines, 16667 bovines and 682199 swines had been slaughtered in 2004, of which 1 sheep was found to be infected with E. granulosus cysts.

Recent actions taken to control the zoonoses

1080 samples of dog stools originating from 52 villages considered as E/H foci have been examined with the coproantigen ELISA test, yielding negative results. 65 dogs and 2 foxes had necrotomically been examined and found to be free of E. granulosus. The same period 11241 Praziquantel baits have been distributed in the buffer zone and areas where information indicates that stray dogs exist.

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

Table 9.2.A Echinococcosis in man - species/serotype distribution

	Cases	Cases Inc	Autochtone cases	Autochtone Inc	Imported cases	Imported Inc
Echinococcus	0	0	0	0	0	0
E. granulosus						
E. multilocularis						
Echinococcus spp.						

Footnote

NO DATA AVAILABLE

Table 9.2.B Echinococcosis in man - age distribution

Age Distribution	E. granulosus			E. multilocularis			Echinococcus spp.		
	All	M	F	All	M	F	All	M	F
<1 year	0			0			0		
1 to 4 years	0			0			0		
5 to 14 years	0			0			0		
15 to 24 years	0			0			0		
25 to 44 years	0			0			0		
45 to 64 years	0			0			0		
65 years and older	0			0			0		
Age unknown	0			0			0		
Total :	0	0	0	0	0	0	0	0	0

Footnote

NO DATA AVAILABLE

2.9.3. Echinococcus in animals

Table 9.1 Echinococcus sp. in animals

	Source of information	Remarks	Epidemiological unit	Units tested	Echinococcus spp.	E. multilocularis	E. granulosus
Cattle (bovine animals)			CARCASS	16667	0	0	0
Sheep			CARCASS	110372	0	0	1
Goats			CARCASS	172022	0	0	0
Pigs			CARCASS	682199	0	0	0
Pet animals							
dogs			CARCASS	65	0	0	0
Wildlife							
foxes			CARCASS	2	0	0	0

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

Table 10.2.A Toxoplasmosis in man - species/serotype distribution

Toxoplasma	Cases	Cases Inc
Toxoplasma spp. congenital cases	0	0

Footnote

Toxoplasmosis Mandatory Notified Disease since January 2005 therefore no data are available for 2004.

Table 10.2.B Toxoplasmosis in man - age distribution

Age Distribution	Toxoplasma spp.		
	All	M	F
<1 year	0		
1 to 4 years	0		
5 to 14 years	0		
15 to 24 years	0		
25 to 44 years	0		
45 to 64 years	0		
65 years and older	0		
Age unknown	0		
Total :	0	0	0

Footnote

Toxoplasmosis became a mandatory notifiable disease as of January 2005, therefore no data are available for 2004.

2.10.3. Toxoplasma in animals

Table 10.1 Toxoplasma gondii in animals

	Source of information	Remarks	Epidemiological unit	Units tested	Units positive
Cattle (bovine animals)				0	
Sheep				0	
Goats				0	
Pigs				0	
Solipeds				0	
Pet animals					
dogs				0	
cats				0	

Footnote

NO DATA AVAILABLE

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 to enter Cyprus either on a non commercial movement or on a commercial movement it is required to be vaccinated against Rabies.
The time period prior to which the vaccination should have taken place depends on the country of origin as set by the EU Regulation 998/2003/EK and the related EU Decisions.
Animals originating from EU countries and third countries mentioned in Part B, 2 and Part C of Annex II of regulation 998/2003/EK are required to be vaccinated/revaccinated against Rabies at least 30 days prior departrure for Cyprus. Animals originating from third countries not mentioned in Part B, 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 departure for Cyprus.
The blood sampling should have taken place at leat 30 days after Rabies vaccination/revaccination and 90 days prior departure for Cyprus.
Animals originating from Cyrpus, taken on a trip to one of the third countries not mentioned in Part B, 2 and Part C of Annex II of Regulation 998/2003/EK, and which will return to Cyprus are required to have a RNA positive blood titration prior leaving Cyprus for 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 MICOBIOLOGY LABORATORY CRITERIA

Notification system in place

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

History of the disease and/or infection in the country

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

2.11.3. Lyssavirus (rabies) in animals

A. Rabies in dogs

Monitoring system

Sampling strategy

Cyprus is free from Rabies.
Concerning the animals to enter Cyprus either on a non commercial movement or on a commercial movement it is required to be vaccinated against Rabies.
The time period prior to which the vaccination should have taken place depends on the country of origin as set by the EU Regulation 998/2003/EK and the related EU Decisions.
Animals originating from EU countries and third countries mentioned in Part B, 2 and Part C of Annex II of regulation 998/2003/EK are required to be vaccinated/revaccinated against Rabies at least 30 days prior departrure for Cyprus. Animals originating from third countries not mentioned in Part B, 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 departure for Cyprus.
The blood sampling should have taken place at leat 30 days after Rabies vaccination/revaccination and 90 days prior departure for Cyprus.
Animals originating from Cyrpus, taken on a trip to one of the third countries not mentioned in Part B, 2 and Part C of Annex II of Regulation 998/2003/EK, and which will return to Cyprus are required to have a RNA positive blood titration prior leaving Cyprus for 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, 2 and Part C of Annex II of Regulation 998/2003/EK and which will return back to Cyprus.

Type of specimen taken

Blood

Methods of sampling (description of sampling techniques)

Blood is sampled 30 days after tha day Rabies vaccination was administered and is sent to one of the EU recognised laboratories for evaluation of the Rabies Neutralising Antibodies titer.

Case definition

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

Diagnostic/analytical methods used

Other: Hellers stain

Vaccination policy

Rabies vaccination is voluntary as Cyprus is free from Rabies.
In case the animal is to travel abroad the relevant vaccination and antibodies titration take place within the required time frame.

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 positives 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 5.1 Rabies in animals

	Source of information	Remarks	Animals tested	Animals positive
Cattle (bovine animals)			0	
Sheep			0	
Goats			0	
Pigs			0	
Solipeds			0	
Wildlife				
bats			0	
foxes			0	
other			0	
all			0	
Pet animals				
dogs			0	
cats			0	
other			0	

Footnote

NO DATA AVAILABLE

3. INFORMATION ON SPECIFIC INDICATORS OF ANTIMICROBIAL RESISTANCE

3.1. E. COLI INDICATORS

3.1.1. General evaluation of the national situation

A. E. 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* isolates

Table 13.1 Antimicrobial susceptibility testing of E.coli in animals

	E.coli							
	Cattle (bovine animals)		**Pigs**		**Gallus gallus**		**Turkeys**	
Isolates out of a monitoring program	no		no		no		no	
Number of isolates available in the laboratory	0		0		0		0	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 13.6 Antimicrobial susceptibility testing of E.coli in food

	E.coli							
	Broiler meat		**Other poultry meat**		**Pig meat**		**Bovine meat**	
Isolates out of a monitoring program	no		no		no		no	
Number of isolates available in the laboratory	0		0		0		0	
Antimicrobials:	**N**	**%R**	**N**	**%R**	**N**	**%R**	**N**	**%R**

Footnote

NO DATA AVAILABLE

Table 13.8 Antimicrobial susceptibility testing of E.coli. in humans - qualitative data

	E.coli	
	humans	
Isolates out of a monitoring program	no	
Number of isolates available in the laboratory	0	
Antimicrobials:	**N**	**%R**

Footnote

NO DATA AVAILABLE

4. FOODBORNE OUTBREAKS

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

A. Foodborne outbreaks

System in place for identification, epidemological 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