

ZOONOSES MONITORING

Montenegro

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

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

IN 2017

PREFACE

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

The report contains information on trends and sources of zoonoses and zoonotic agents in Montenegro during the year 2017.

The information covers the occurrence of these diseases and agents in animals, foodstuffs and in some cases also in feedingstuffs. In addition the report includes data on antimicrobial resistance in some zoonotic agents and indicator bacteria as well as information on epidemiological investigations of foodborne outbreaks. Complementary data on susceptible animal populations in the country is also given. The information given covers both zoonoses that are important for the public health in the whole European Union as well as zoonoses, which are relevant on the basis of the national epidemiological situation.

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

The report presents the results of the examinations carried out in the reporting year. A national evaluation of the epidemiological situation, with special reference to trends and sources of zoonotic infections, is given. Whenever possible, the relevance of findings in foodstuffs and animals to zoonoses cases in humans is evaluated. The information covered by this report is used in the annual European Union Summary Reports on zoonoses and antimicrobial resistance that are published each year by EFSA.

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

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

List of Contents

ANIMAL POPULATION TABLES	3
DISEASE STATUS TABLES FOR BRUCELLA	4
Bovine brucellosis in countries and regions that do not receive Community co-financing for eradication programme	۵
Ovine or Caprine brucellosis in countries and regions that do not receive Community co-financing for eradication programme	5
DISEASE STATUS TABLES FOR MYCOBACTERIUM	6
Bovine tuberculosis in countries and regions that do not receive Community co-financing for eradication programme	e
PREVALENCE TABLES	7
COXIELLA	7
animal	7
LISTERIA	
food	
Salmonella: SAI MONEI I A	17
animal	17
food	13
food	15
Trichinella: TRICHINFI I A	16
animal	16
FOODBORNE OUTBREAKS TABLES	17
AMR TABLES FOR CAMPYLOBACTER	20
AMR TABLES FOR SALMONELLA	21
AMR TABLES FOR ESCHERICHIA COLI	21
ANIE TABLES FOR TABLES	22
UTIER APPER LABOLES ESBL	23
LODE LITEST TRANSMISSIONS	24

ANIMAL POPULATION TABLES

Table Susceptible animal population

Cattle (bovine animals) Cattle (bovine animals) Callus gallus (fowl) Gallus gallus (fowl) - broilers		Population								
			slaughter animal							
Animal species	Category of animals	animal	(heads)	herd/flock						
Cattle (bovine animals)	Cattle (bovine animals)	92,967	29,193	24,076						
Gallus gallus (fowl)	Gallus gallus (fowl) - broilers		1,176,712							
Goats	Goats	46,704	246							
Pigs	Pigs	34,723	12,444	10,896						
Sheep	Sheep	335,626	27,975							
Sheep and goats	Sheep and goats			7,968						

DISEASE STATUS TABLES

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

Region	Number of herds with status officially free	Number of infected herds	Total number of herds
Montenegro	0	0	24,076

Table Ovine or Caprine brucellosis in countries and regions that do not receive Community co-financing for eradication programme

Region	Number of herds with status officially free	Number of infected herds	Total number of herds
Montenegro	0	0	7.968

DISEASE STATUS TABLES

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

F	Region	Number of herds with status officially free	Number of infected herds	Interval between routine tuberculin tests	Total number of herds
	Montenegro	0	0	12	24,076

PREVALENCE TABLES

Table COXIELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Method	Total units tested	Total units positive	N of clinical affected herds	Zoonoses	N of units positive
Not Available	Cattle (bovine animals) - Farm - Not Available - animal sample - blood - Surveillance - Official sampling - Objective sampling	animal	Not Available	14	2		Coxiella burnetii	2
	Sheep and goats - Farm - Not Available - animal sample - blood - Surveillance - Official sampling - Objective sampling	animal	Not Available	425	57		Coxiella burnetii	57

Table LISTERIA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive	
Not Available	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	10	0	<= 100	Listeria monocytogenes	10	0	
		d)					>100	Listeria monocytogenes	10	0	
	Cheeses made from cows' milk - hard - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	151	2	<= 100	Listeria monocytogenes	151	2	
		d)					>100	Listeria monocytogenes	151	2	
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	15	1	detection	Listeria monocytogenes	15	1	
				Gram	1	0	detection	Listeria monocytogenes	1	0	
	Cheeses made from cows' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	10	0	<= 100	Listeria monocytogenes	10	0	
		d)					>100	Listeria monocytogenes	10	0	
	Cheeses made from goats' milk - soft and semi-soft - made from pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	170	0	<= 100	Listeria monocytogenes	170	0	
		d)					>100	Listeria monocytogenes	170	0	
	Cheeses made from goats' milk - soft and semi-soft - made from pasteurised milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	4	0	detection	Listeria monocytogenes	4	0	
				Gram	10	0	detection	Listeria monocytogenes	10	0	
	Cheeses made from goats' milk - soft and semi-soft - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	9	0	<= 100	Listeria monocytogenes	9	0	
		d)					>100	Listeria monocytogenes	9	0	
	Cheeses, made from unspecified milk or other animal milk - unspecified - made from pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling			Gram	29	3	<= 100	Listeria monocytogenes	29	3	
		d)					>100	Listeria monocytogenes	29	3	
	Confectionery products and pastes - hard candy - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	2	0	<= 100	Listeria monocytogenes	2	0	
		d)					>100	Listeria monocytogenes	2	0	
	Dairy products (excluding cheeses) - butter - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	34	2	<= 100	Listeria monocytogenes	34	2	
		d)					>100	Listeria monocytogenes	34	2	
	Dairy products (excluding cheeses) - butter - made from pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	25	0	<= 100	Listeria monocytogenes	25	0	
		d)					>100	Listeria monocytogenes	25	0	
	Dairy products (excluding cheeses) - cream - made from pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	81	0	<= 100	Listeria monocytogenes	81	0	
		d)					>100	Listeria monocytogenes	81	0	
	Dairy products (excluding cheeses) - cream - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling		10	10 G	10 Gram	22	0	<= 100	Listeria monocytogenes	22	0
		d)					>100	Listeria monocytogenes	22	0	

rea of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit		Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive			
Not Available	Dairy products (excluding cheeses) - dairy products, not specified - ready-to-eat - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	1	0	<= 100	Listeria monocytogenes	1	0			
		d)					>100	Listeria monocytogenes	1	0			
	Dairy products (excluding cheeses) - fermented dairy products - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	1	0	<= 100	Listeria monocytogenes	1	0			
		d)					>100	Listeria monocytogenes	1	0			
	Dairy products (excluding cheeses) - fermented dairy products - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	10	Gram	2	0	<= 100 >100	Listeria monocytogenes	2	0			
	Dairy products (evaluating absence), ice group, made from postsurized will. Parder inspection activities. Not Available		10	Crom	115	0	<= 100	Listeria monocytogenes	2	0			
	Dairy products (excluding cheeses) - ice-cream - made from pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	115	U	>100	Listeria monocytogenes Listeria	115	0			
	Dairy products (excluding cheeses) - milk powder and whey powder - Border inspection activities - Not Available - food	single	10	Gram	5	0	<= 100	monocytogenes Listeria	115	0			
	sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	(food/fee d)	10	Orani	Ü	Ü	>100	monocytogenes Listeria	5	0			
	Dairy products (excluding cheeses) - yoghurt - Border inspection activities - Not Available - food sample - Surveillance -	single	10	Gram	75	0	<= 100	monocytogenes Listeria	5	0			
	baséd on Regulation 2073 - Official sampling - Objective sampling	(food/fee d)					>100	monocytogenes Listeria	75 75	0			
	Dairy products (excluding cheeses) - yoghurt - Processing plant - Not Available - food sample - Surveillance - based on	single	25	Gram	5	0	detection	monocytogenes Listeria					
	Regulation 2073 - Official sampling - Objective sampling	(food/fee d)			- 12		100	monocytogenes	5	0			
	Fish - smoked - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	10	0	<= 100	Listeria monocytogenes	10	0			
							>100	Listeria monocytogenes	10	0			
	Fishery products, unspecified - seafood pâté - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	5	0	<= 100	Listeria monocytogenes	5	0			
	Foodstuffs intended for special nutritional uses - other food for infants and children - Border inspection activities - Not	,	10	Gram	15	0	>100	Listeria monocytogenes	5	0			
	Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	10	Giaili	15	U	>100	Listeria monocytogenes Listeria	15	0			
	Fruits - whole - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single	10	Gram	1	0	<= 100	monocytogenes Listeria	15	0			
	Truits - whole - Frocessing plants - Not Available - 1000 Sample - Outveillance - Oniolai Sampling - Objective Sampling	(food/fee d)	10	Oram	•	· ·	>100	monocytogenes Listeria	1	0			
	Fruits and vegetables - products - Border inspection activities - Not Available - food sample - Surveillance - Official	single	10	Gram	1	0	<= 100	monocytogenes Listeria	1	0			
	sampling - Objective sampling	(food/fee d)			·		>100	monocytogenes Listeria	1	0			
	Meat from bovine animals - fresh - frozen - Border inspection activities - Not Available - food sample - Surveillance - based	single	25	Gram	12 4	12 4	12 4	12 4	12 4	<= 100	monocytogenes Listeria	1 12	4
	on Regulation 2073 - Official sampling - Objective sampling	(food/fee d)					>100	monocytogenes Listeria	12	4			
	Meat from bovine animals - meat products - raw and intended to be eaten raw - Retail - Not Available - food sample -	single	10	Gram	8	0	<= 100	monocytogenes Listeria	8	0			
	Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	(food/fee d)					>100	Listeria	8	0			
	Meat from other animal species or not specified - meat products - Border inspection activities - Not Available - food sample	single (food/foo	10	10 Gram	Gram 29	29	0	<= 100	monocytogenes Listeria	29	0		
	- Surveillance - Official sampling - Objective sampling	(food/fee d)					>100	monocytogenes Listeria monocytogenes	29	0			

9

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	135	0	<= 100	Listeria monocytogenes	135	0
		d)					>100	Listeria monocytogenes	135	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	12	0	detection	Listeria monocytogenes	12	0
	Meat from other animal species or not specified - meat products - cooked, ready-to-eat - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	296	0	<= 100	Listeria monocytogenes	296	0
							>100	Listeria monocytogenes	296	0
	Meat from other animal species or not specified - meat products - fermented sausages - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	41	0	<= 100	Listeria monocytogenes	41	0
				0			>100	Listeria monocytogenes	41	0
	Meat from other animal species or not specified - meat products - fermented sausages - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)		Gram	6	0	detection	Listeria monocytogenes	6	0
	Meat from other animal species or not specified - meat products - fermented sausages - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	98	0	<= 100	Listeria monocytogenes	98	0
							>100	Listeria monocytogenes	98	0
	Meat from other animal species or not specified - meat products - heat treated, ready to eat - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	4	0	detection	Listeria monocytogenes	4	0
	Meat from other animal species or not specified - meat products - unspecified, ready-to-eat - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	8	0	<= 100	Listeria monocytogenes	8	0
		d)					>100	Listeria monocytogenes	8	0
	Meat from other animal species or not specified - meat products - unspecified, ready-to-eat - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	10	Gram	4	0	<= 100	Listeria monocytogenes	4	0
	Most from high most products, you and intended to be acted you. Perder inspection activities. Not Available, food		10	Gram	10	0	>100	Listeria monocytogenes Listeria	4	0
	Meat from pig - meat products - raw and intended to be eaten raw - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)		Giaili	10	0	>100	monocytogenes Listeria	10	0
	Meat from pig - meat products - raw and intended to be eaten raw - Processing plant - Not Available - food sample -	single	25	Gram	5	0	detection	monocytogenes Listeria	10	0
	Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	(food/fee d)						monocytogenes	5	0
	Meat from pig - meat products - raw but intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee	10	Gram	60	0	<= 100	Listeria monocytogenes	60	0
		d)					>100	Listeria monocytogenes	60	0
	Meat from sheep - fresh - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	2	0	<= 100	Listeria monocytogenes	2	0
		,					>100	Listeria monocytogenes	2	0
	Meat from turkey - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	2	0	<= 100	Listeria monocytogenes	2	0
	Milk cours' pactourized milk. Perder inspection activities. Not Available, food cample. Surveillance, based on			0-	10	0	>100	Listeria monocytogenes	2	0
	Milk, cows' - pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	10	Gram	10	0	<= 100	Listeria monocytogenes	10	0
		ω,					>100	Listeria monocytogenes	10	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit		Sample weight unit	Total units tested	Total units positive	Method	Zoonoses	N of units tested	N of units positive
Not Available	Milk, cows' - pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	6	0	<= 100	Listeria monocytogenes	6	0
		d)					>100	Listeria monocytogenes	6	0
	Other processed food products and prepared dishes - ices and similar frozen desserts - water-based ice creams - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	3	0	<= 100	Listeria monocytogenes	3	0
		d)					>100	Listeria monocytogenes	3	0
	Spices and herbs - dried - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee	10	Gram	2	0	<= 100	Listeria monocytogenes	2	0
		d)					>100	Listeria monocytogenes	2	0

Table Salmonella: SALMONELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	N of flocks under control programme		Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Gallus gallus (fowl) - unspecified - Farm - Not Available - animal sample - organ/tissue - Surveillance - Official sampling - Objective sampling	animal		N_A	Not Available	120	1	Salmonella Enteritidis	1
	Gallus gallus (fowl) - unspecified - Farm - Not Available - environmental sample - boot swabs and dust - Surveillance -	herd/floc		N_A	Not Available	45	7	Salmonella Enteritidis	4
	Official sampling - Objective sampling	k						Salmonella group C1	1
								Salmonella group E	1
								Salmonella spp., unspecified	1
	Gallus gallus (fowl) - unspecified - Unspecified - Not Available - environmental sample - boot swabs and dust - Surveillance	herd/floc		N_A	Not Available	25	2	Salmonella group C	1
	- Official sampling - Objective sampling	k						Salmonella group D	1

Table Salmonella:SALMONELLA in food

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Bakery products - pastry - made with raw eggs - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	1	0	Salmonella	0
	Cereals and meals - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	2	0	Salmonella	0
	Cheeses made from cows' milk - fresh - made from raw or low heat-treated milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	9	0	Salmonella	0
	Cheeses made from cows' milk - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	15	0	Salmonella	0
	Cheeses, made from unspecified milk or other animal milk - unspecified - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	10	2	Salmonella	2
	Dairy products (excluding cheeses) - cream - made from pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	5	0	Salmonella	0
	Dairy products (excluding cheeses) - cream - made from pasteurised milk - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	2	0	Salmonella	0
	Dairy products (excluding cheeses) - dairy products, not specified - ready-to-eat - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	10	1	Salmonella	1
	Dairy products (excluding cheeses) - ice-cream - made from pasteurised milk - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	101	0	Salmonella	0
	Dairy products (excluding cheeses) - milk powder and whey powder - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	6	0	Salmonella	0
	Eggs - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073		ISO 6579:2002 Salmonella	120	1	Salmonella	1		
	- Official sampling - Objective sampling	d)						Salmonella Enteritidis	1
	Eggs - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	2	0	Salmonella	0
	Eggs - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	batch (food/fee d)	50	Gram	ISO 6579:2002 Salmonella	49	0	Salmonella	0
	Eggs - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	batch (food/fee d)	50	Gram	ISO 6579:2002 Salmonella	5	0	Salmonella	0
	Fish - raw - frozen - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	5	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	1	0	Salmonella	0
	Foodstuffs intended for special nutritional uses - other food for infants and children - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	14	0	Salmonella	0
	Fruits and vegetables - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	1	0	Salmonella	0
	Live bivalve molluscs - mussels - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	2	0	Salmonella	0

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit	Sample weight	Sample weight unit	Method	Total units tested	Total units positive	Zoonoses	N of units positive
Not Available	Meat from bovine animals - fresh - chilled - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	48	0	Salmonella	0
	Meat from other animal species or not specified - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	24	1	Salmonella	1
	Meat from other animal species or not specified - meat preparation - intended to be eaten cooked - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	25	0	Salmonella	0
	Meat from other animal species or not specified - Processing plant - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	5	0	Salmonella	0
[Meat from pig - fresh - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	17	0	Salmonella	0
	Meat from poultry, unspecified - fresh - Border inspection activities - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	252	0	Salmonella	0
	Meat from poultry, unspecified - fresh - frozen - Border inspection activities - Not Available - food sample -	single (food/fee	25	Gram	ISO 6579:2002 Salmonella	52	3	Salmonella spp., unspecified	3
	Surveillance - based on Regulation 2073 - Official sampling - Objective sampling							Salmonella Typhimurium	3
	Meat from poultry, unspecified - fresh - Processing plant - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	14	1	Salmonella	1
	Meat from poultry, unspecified - fresh - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	17	1	Salmonella spp., unspecified	1
	Meat from poultry, unspecified - mechanically separated meat (MSM) - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	3	0	Salmonella	0
	Meat from turkey - meat preparation - intended to be eaten cooked - Retail - Not Available - food sample - Surveillance - based on Regulation 2073 - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	23	0	Salmonella	0
	Other processed food products and prepared dishes - ices and similar frozen desserts - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	3	0	Salmonella	0
	Other processed food products and prepared dishes - ices and similar frozen desserts - Retail - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	9	0	Salmonella	0
	Spices and herbs - Border inspection activities - Not Available - food sample - Surveillance - Official sampling - Objective sampling	single (food/fee d)	25	Gram	ISO 6579:2002 Salmonella	2	0	Salmonella	0

Table Salmonella:SALMONELLA in feed

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Sampling unit		Sample weight unit	Method		Total units positive	Zoonoses	N of units positive
Not Available	All feedingstuffs - Border inspection activities - Not Available - feed sample - Surveillance - Official sampling - Objective sampling	batch (food/fee d)	25	Gram	Not Available	37	0	Salmonella	0

Table Trichinella:TRICHINELLA in animal

Area of Sampling	Matrix - Sampling stage - Sampling origin - Sample type - Sampling context - Sampler - Sampling strategy	Method	Sampling unit		units positive	Zoonoses	N of units positive
Not Available	Pigs - fattening pigs - raised under controlled housing conditions - Slaughterhouse - Not Available - animal sample -	Not Available	animal	10896	0	Trichinella	0

FOODBORNE OUTBREAKS TABLES

Foodborne Outbreaks: summarized data

		Outbreak strenght	Strong					Weak					
Covertive agent	Food vahiolo		N authroaka N	human assas	N	N dootho	N outbrooks	N human assas	N	N. dootho			
Causative agent	Food vehicle		N OULDreaks N	numan cases	nospitalized	n deaths	N outbreaks	N human cases	nospitalized	N deaths			
Hepatovirus A	Unknown						2	4	4	0			
Unknown	Unknown		6	112	12	0	1	7	0	0			

Strong Foodborne Outbreaks: detailed data

Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food vehicle	Contributory factors	Comment	N outbreaks	N humar cases		
Unknown	Not Available	FBO0 1	Not Available	Unknown	N_A	Descriptive environmenta I evidence	Not Availabl e	Not Available	Not Available	Not Available	N_A	1	41	0	0
		FBO0 3	Not Available	Unknown	N_A	Descriptive environmenta I evidence	Not Availabl e	Not Available	Not Available	Not Available	N_A	1	11	0	0
		FBO0 5	Not Available	Unknown	N_A	Descriptive environmenta I evidence	Not Availabl e	Not Available	Not Available	Not Available	N_A	1	17	0	0
		FBO0 6	Not Available	Unknown	N_A	Descriptive environmenta I evidence	Not Availabl e	Not Available	Not Available	Not Available	N_A	1	12	12	0
		FBO0 7	Not Available	Unknown	N_A	Descriptive environmenta I evidence	Not Availabl e	Not Available	Not Available	Not Available	N_A	1	12	0	0
		FBO0 8	Not Available	Unknown	N_A	Descriptive environmenta I evidence	Not Availabl e	Not Available	Not Available	Not Available	N_A	1	19	0	0

Weak Foodborne Outbreaks: detailed data

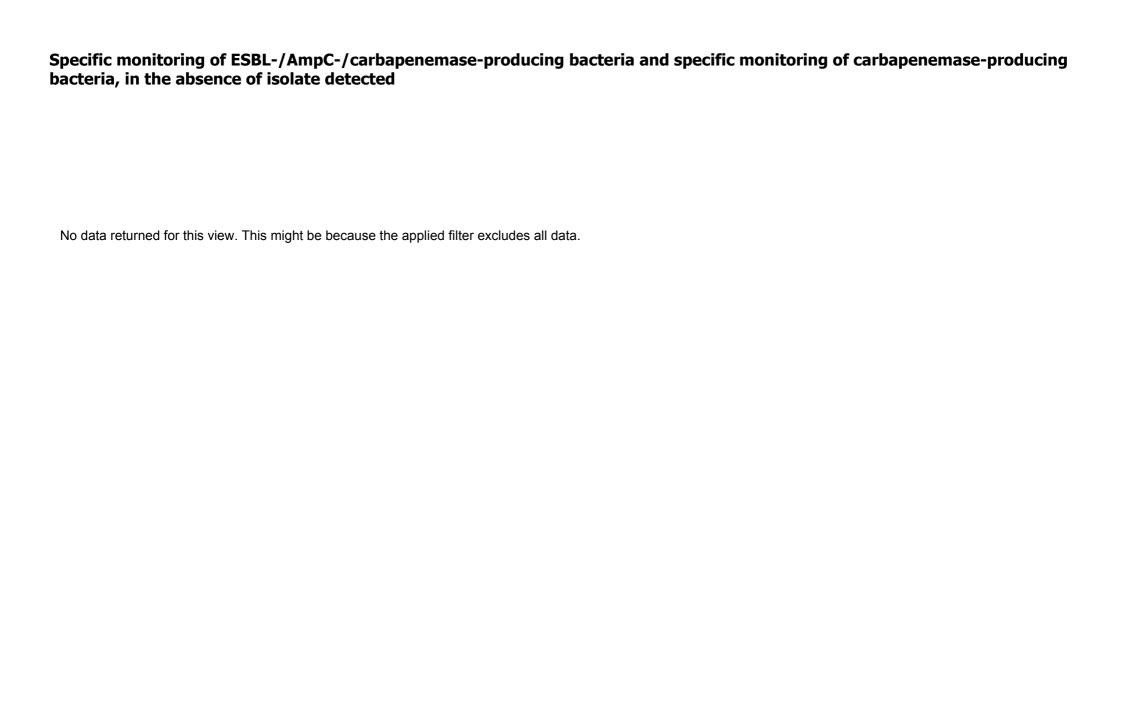
Causative agent	Other Causative Agent	FBO nat. code	Outbreak type	Food vehicle	More food vehicle info	Nature of evidence	Setting	Place of origin of problem	Origin of food	d Contributory factors	Comment	N outbreaks	N huma s case		N sp. deaths
Hepatovir us A	Not Available	FBO0 2	Not Available	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Not Available	Not Available	Not Available	Not Available	N_A	1	2	2	0
		FBO0 9	Not Available	Unknown	N_A	Detection of causative agent in food chain or its environment - Detection of indistinguishable causative agent in humans	Not Available	Not Available	Not Available	Not Available	N_A	1	2	2	0
Unknown	Not Available	FBO0 4	Not Available	Unknown	N_A	Descriptive environmental evidence	Not Available	Not Available	Not Available	Not Available	N_A	1	7	0	0

ANTIMICROBIAL RESISTANCE TABLES FOR CAMPYLOBACTER

ANTIMICROBIAL RESISTANCE TABLES FOR SALMONELLA

ANTIMICROBIAL RESISTANCE TABLES FOR INDICATOR ESCHERICHIA COLI

OTHER ANTIMICROBIAL RESISTANCE TABLES





Latest Transmission set

Last submitted

Table Name	dataset transmission date
Animal Population	04-Mar-2019
Disease Status	24-Apr-2018
Food Borne Outbreaks	01-Mar-2019
Prevalence	01-Mar-2019

Montenegro, Text Forms 2017

Table of contents

1.	Institutions and Laboratories involved in zoonoses monitoring and reporting	1
2.	Animal population	.2
add	Description of Monitoring/Surveillance/Control programmes system*: Please I the matrix and zoonotic agent <i>L. monocytogenes</i> in food - All foodstuffs - d sample	.3
4.	Food-borne Outbreaks	.4

1. Institutions and Laboratories involved in zoonoses monitoring and reporting

- Ministry of Agriculture and Rural Development Administration for Food Safety, Veterinary and Phytosanitary Affairs
- Institute for Public Health (IPH)
- Diagnostic Veterinary Laboratory

The Ministry of Agriculture and Rural Development (MARD) is the competent authority for the field of food safety, veterinary and phytosanitary policy. Administration for Food Safety, Veterinary and Phytosanitary Affairs (AFSVPA) was established by the Decree on amendments to the Decree on the Organisation and Functioning of Public Administration (Official Gazette of Montenegro 80/15). This Administration has been established by merger of the existing Veterinary and Phytosanitary Administrations and the Division for Food Safety of the Ministry of Health. As provided in Decree on the Organisation and Manner of Work of State Administration and published in Official Gazette of Montenegro no. 087/18 from 31.12.2018, AFSVPA became independent state administration body. The MARD is in charge of proposing food and feed safety policy; adopts regulations for the enforcement of this Law, adopts annual monitoring programmes (residues in food of animal origin and feed, pesticide residues in food, zoonoses, microbiological criteria in food, contaminants in food and feed and other programmes in accordance with Food Safety Law); organizes conducting of official controls in the field of food safety; adopts a multi-annual national control plan of official controls for food and feed in accordance with Food Safety Law; submits annual reports on food and feed safety to the Government of Montenegro and the European Commission in accordance with Food Safety Law; cooperates with international organizations and competent authorities of other states in the field of food and feed safety and performs other activities in accordance with Food Safety Law.

The IPH carries out analyses of food, materials and items coming in contact with food: microbiological, parasitological, chemical, biological, toxicological, biochemical and other laboratory analyses, analyses of drinking water, surface and waste waters, etc.

The Diagnostic Veterinary Laboratory has accredited a larger number of methods in the following fields: microbiological analyses of food of animal origin: meat and meat products, milk and dairy products, eggs and egg products; parasitological testing of meat and meat products.

2. Animal population

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

Database of the Administration for food safety, veterinary and phytosanitary affairs $\frac{31}{12}$

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

Holding: any establishment, construction or, in the case of an open-air farm, any place in which animals are held, kept or handled. A geographical entity is a unit of one building or a complex of buildings included grounds and territories where an animal species is or could be hold.

Herd: an animal or group of animals kept on a holding as an epidemiological unit; if more than one herd is kept on a holding, each of these herds shall form a distinct unit and shall have the same health status.

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

Over the last years, there's an increased in total number of holdings of bovines, porcine, sheep and goats. The total number of bovine, porcine, sheep and goats changed what means that the mean total number of animals per holding is increasing.

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

Montenegro can be geographically divided into 3 regions: south, central and north. Animal population is concentrated in central and north region.

5. Additional information

Number of animals = number of animals at a certain time point of the year. Number of slaughtered animals = total number of slaughtered animals during the year

3. Description of Monitoring/Surveillance/Control programmes system*: Please add the matrix and zoonotic agent *L. monocytogenes* in food - All foodstuffs - food sample

1. Monitoring/Surveillance/Control programmes system

Samples are taken according to the national control program or in the frame of RASFF, complains or suspicion.

2. Measures in place^(b)

The controls are performed by Official Inspector for Food

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

In accordance with Food Safety Law (Official Gazette MNE 57/2015) measures are taken by the Competent Authority (AFSVPA)

4. Additional information

Diagnostic/analytical methods used

At the production plant: ISO 11290:1:detection method; At retail: ISO 11290:2 standard chromogenic medium (ALOA): enumeration method.

Definition of positive finding

At the production plant a sample is considered to be positive after detection of Listeria monocytogenes. At retail a sample is considered to be positive for Listeria monocytogenes when more than 100 cfu/g were detected.

4. Food-borne Outbreaks

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

The system functions on the basis of the Law on Health Care (Official Gazette of Montenegro no. 3/2016, 39/2016, 2/2017 and 44/2018) and the Law on the Protection of Population from Infectious Diseases (OGM no. 12/2018) and other regulations as a Rules on the method of notification of infectious diseases, hospital infections, conditions and death from infectious diseases, etc.

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

During 2017, 14 epidemics of infectious diseases were registered in Montenegro. Compared to previous years, there has been partially improved reporting of the disease from infectious diseases in epidemic form, although from a number of municipalities officially no reports of epidemic reporting of certain infectious diseases have been reported. Therefore, it is common practice that the Center for the Control and Prevention of Infectious Diseases, after receiving the notification of infectious diseases, subsequently assesses whether there have been epidemic reports of certain infectious diseases in some municipalities.

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

Of the total of 14 reported epidemics, seven of them can be characterized as foodborne outbreaks, plus/including 2 epidemics with contact transfer mode (Hepatitis virosa acuta A). In relation to the way in which infectious diseases are spread, the most common is the alimentary pathway of transmission (7 outbreaks), with 119 cases.

4. Descriptions of single outbreaks of special interest

no outbreaks of special interest5. Control measures or other actions taken to improve the situation

For the implementation of control measures, local hygiene and epidemiological services are responsible as well as the Department for Health and Sanitary Inspection from Directorate for Inspection Affairs.

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

NA

7. Additional information

Some of the measures that apply:

- early detection and epidemiological surveillance;
- epidemiological examination;
- laboratory testing to determine the causes of infectious diseases and causative agents;
- setting the diagnosis of an infectious disease;
- reporting infectious diseases;
- transportation, isolation and treatment of patients with infectious diseases;
- health education of the sick, members of their families and other persons who are at risk of illness from infectious diseases;
- informing the healthcare workers of the facility;
- Disinfection, disinsection and pest control, according to epidemiological indications.
- (a): Trends in numbers of outbreaks and numbers of human cases involved, relevance of the different causative agents, food categories and the agent/food category combinations, relevance of the different type of places of food production and preparation in outbreaks, evaluation of the severity of the human cases.