

HEALTH, REPRODUCTION AND VETERINARY - HYGIENE MONITORING OF SHEEP AND GOATS AND THEIR PRODUCTS BY THE ANIMAL HEALTH CENTRE OF SLOVENIA IN 1996 AND 1997

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Monitoring and veterinary practice on the health, reproduction and hygiene control of sheep and goats and their products by the Animal Health Centre of Slovenia in 1996 and 1997 are presented. It is concluded, that the veterinary-sanitary control of male animals and the hygiene of products for human consumption at farm guesthouses have been deficient.

Key words: *veterinary practice, sheep, goat*

Abbreviation key: *AHCS = the Animal Health Centre of Slovenia, PVP = private veterinary practitioners, VIS = the Veterinary Institute of Slovenia, SG = sheep and goats.*

INTRODUCTION

The Animal Health Centre of Slovenia (AHCS) was founded by the Slovenian Government and started to operate on July 1, 1995, after the veterinary branch had been divided into three levels by the new veterinary legislation (1). The primary level includes basic veterinary activities, done by private veterinary practitioners (PVP). The third level contains top specialist veterinary activities in the Veterinary Institute of Slovenia (VIS). The AHCS is a part of the secondary level, with activities on animal reproduction, epidemic diseases, hygiene of food of animal origin, laboratory and pathomorphological diagnostics, findings causes of animal death, removal of dead animals and confiscates and their transportation to collection sites, veterinary-sanitary import and export control and health and reproduction of bees and fish. All presented data is obtained from the AHCS annual reports (2).

MONITORING OF REPRODUCTION IN SHEEP AND GOATS IN 1996 AND 1997 IN SLOVENIA

Owners keep rams and male goats mainly for 2 years, then most of the animals are slaughtered, only a few are sold to other farmers. Therefore there are not enough male animals with a known and controlled origin and some farmers breed sheep and goats (SG) using males of unknown and not controlled origin.

In 1996 and 1997 commissions consisted of representatives of the state agricultural administration in the local community, farmers and local experts on selection and reproduction (by the AHCS) visited most of the SG owners once a year, to check the compliance of breed, origin, reproduction and health of male SG with regulations.

Since august 1997, before mating SG, all male animals must have been researched on and must have been free of brucellosis melitensis and ovis, tuberculosis, Q-fever, abortus chlamydialis and border disease (3). Examinations have been performed by the PVP and the VIS. Results have been reported to the PVP and the AHCS. Testicles, epididymises and bites have been checked as well. In 1997 the number of males monitored by the AHCS has increased, although all the animals in breed have not yet been included (table 1).

Table 1: Reproduction in sheep and goats, monitored by the AHCS in 1996 and 1997 in Slovenia.

	Number of	1996 / 1997	Ind. 96/97
Sheep	herds	518 / 642	124
	rams	652 / 845	130
	sheep	18.562 / 23.932	129
Goats	herds	50 / 89	178
	male goats	61 / 105	172
	goats	1.364 / 2.076	152

VETERINARY-SANITARY CONTROL OF DOMESTIC TRANSPORT OF SHEEP AND GOATS IN 1996 AND 1997 IN SLOVENIA

Veterinary-sanitary control of domestic transport of SG is under the PVP competence. In 1997 consignments increased, but there were fewer animals (table 2).

Table 2: Veterinary-sanitary control of transport of sheep and goats in 1996 and 1997 in Slovenia.

	Number of consignments		Number of animals	
	96 / 97	Ind. 97:96	96 / 97	Ind. 97:96
Sheep, goats	250 / 882	353	19.998 / 4.933	25
Lambs, kids	203 / 438	216	4.063 / 4.516	111

THE HYGIENE OF FOOD OF SHEEP AND GOATS ORIGIN IN 1996 AND 1997 IN SLOVENIA

In 1997 in dairyhouses and farm guesthouses 166.645 litres of SG milk were transformed into milk products under the AHCS control.

Consignments of SG, coming to slaughterhouses, have been checked on by the AHCS specialist for food hygiene. Consignments have been from abroad, other and the same local community. The number of consignments and animals increased a lot in 1997 (table 3).

Table 3: Veterinary-sanitary checking of sheep and goat consignments to slaughterhouses from abroad, the other and the same local community in 1996 and 1997 in Slovenia

	Number of consignments		Number of animals	
	96 / 97	Ind. 97:96	96 / 97	Ind. 97:96
From abroad	0 / 1		0 / 270	
From the other local comm.	193 / 420	217	2.256 / 4.535	201
From the same local comm.	222 / 415	186	1.156 / 3.012	260
Total	415 / 836	201	3.412 / 7.817	229

In slaughterhouses the hygienic quality of SG products improved in 1997. There has been more hygienically suitable food, relatively less hygienically unsuitable food and food that had to be treated by a high temperature before leaving slaughterhouses for consumption. In 1997 fewer animals were examined at farm guesthouses, and the hygiene was worse (table 4).

Table 4: Compliance of food of sheep and goats origin with prescribed standards in 1996 and 1997 in Slovenia.

	In slaughterhouses		At farm guesthouses	
	96 / 97	Ind. 97:96	96 / 97	Ind. 97:96
Number of animals	3.412 / 8.053	236	197 / 92	46,7
Hygienically suitable - kg	45.751 / 106.105	232	3.374 / 1.070	31,7
Conditionally hyg. sui - kg	63 / 172	273	- / -	
Hygienic. unsuitable - kg	421 / 567	135	- / -	

EPIZOOTIOLOGY IN SHEEP AND GOATS IN 1996 AND 1997 IN SLOVENIA

In Slovenia the annual vaccination of SG against antrax and gangrene emphysematosa on the state account is prescribed before pasturing in districts where these diseases have been found in the last 50 years and if lyssa is present (4). The number of SG, vaccinated in 1997 by the PVP, generally increased (table 5).

Table 5: Vaccinated sheep and goats in 1996 and 1997 in Slovenia

Disease	Number of animals	
	96 / 97	Ind. 97:96
Anthrax	205 / 239	117
Gangrene emphy.	851 / 386	45
Lyssa	4.748 / 8.017	169

The prescribed diagnostics (4) of contagious diseases has been performed by the PVP and the VIS and reported to the AHCS. In 1997 in total more SG were researched, more owing to suspected diseases or on imported animals (other), but fewer on prescribed diagnostics (legislation) that was performed on the state account (table 6).

Table 6: Diagnostics of contagious diseases in sheep and goats in 1996 and 1997 in Slovenia.

Disease	Legislation		Other		Total	
	96 / 97	In. 97:96	96 / 97	In. 97:96	96 / 97	In. 97:96
Leptospirosis	0 / 243		49 / 70	142,9	49 / 313	638,8
Tuberculosis	2.819 / 1.594	56,5	0 / 59		2.819 / 1.653	58,7
ParaTBC(blood)	559 / 1.477	264,2	0 / 54		559 / 1.531	273,9
Brucell. (blood)	1.070 / 951	88,9	3 / 494	16.466	1.073 / 1.445	134,7
Brucell. (milk)	0		0 / 85		0 / 85	
Melitocosis	228 / 9	3,9	18 / 279	1.550	246 / 288	117
Q fever	486 / 205	42,2	10 / 557	5.570	496 / 762	153,6
Abortus chlamy.	0 / 243		154 / 21	13,6	154 / 264	171,4
Listeriosis	0 / 0		410 / 706	172,2	410 / 706	172,2
Aptiae epizoot.	0		0 / 46	0	0 / 46	
Total	5.162 / 4.722	91,5	644 / 2.371	368	5.806 / 7.093	122,2

In 1996, listeriosis, paratuberculosis, leptospirosis, brucellosis and abortus chlamydialis were found in 99 SG in 18 herds. In 1997, listeriosis was found in 41 SG in 15 herds, brucellosis in 20 rams in 14 herds and paratuberculosis in 7 sheep in 4 herds.

BASIC VETERINARY ACTIVITIES IN SHEEP AND GOATS IN 1996 AND 1997 IN SLOVENIA

Basic veterinary activities, done by the PVP, include animal reproduction and health protection. 16.446 of SG were treated in 1997, mainly for parasitic (72,4 %) and internal diseases (17 %). The treatment of intoxications has been the least successful (83,3 %), followed by interventions at parturition (86,3 %), other (91 %), infectious (94,7 %) and internal diseases (94,7 %).

THE REMOVAL OF DEAD SHEEP AND GOATS AND THEIR CONFISCATES AND TRANSPORTING THEM TO COLLECTION SITES IN 1996 AND 1997 IN SLOVENIA

In 1997 there was less dead SG (1.250 / 5.188) and confiscates (44.978 kg / 18.1580 kg) removed and transported to collection sites by the AHCS.

PATHOMORPHOLOGICAL DIAGNOSTIC IN SHEEP AND GOATS IN 1996 AND 1997 IN SLOVENIA

Pathomorphological diagnostics in SG is performed by the AHCS (table 7). The amount of work has increased, farmers and PVP have been more and more interested in finding causes of death. The state has also supported the extension of pathomorphological diagnostics by financing diagnostics of most infectious diseases (5).

Table 7: Pathomorphological diagnostic in sheep and goats in 1996 and 1997 in Slovenia

	Inf. 1	Inf. 2	Paras.	Int.	Repro.	Intox.	Traum	Other	Total
96 / 97	7 / 17	55 / 99	40 / 61	55 / 94	7 / 23	15 / 14	12 / 87	12 / 20	203 / 415
Ind. 97:96	243	180	153	171	329	93	725	167	204

Among other causes of death, listeriosis, mastitis, pneumonia, parasites and internal diseases increased in 1997 (table 8).

Table 8: Some diseases from table 7 diagnosed in sheep and goats in 1996 and 1997 in Slovenia.

Pathomorphological diagnosis	96 / 97	Ind. 97:96
Inf. 1: Listeriosis	3 / 13	433
Abortus chlamydialis	4 / 0	
Mastitis	0 / 4	
Inf. 2: Pneumonia	23 / 35	153
Parasites: Coccidiosis	11 / 10	91
Fasciolosis	6 / 0	
Gastroenter. nematodes	6 / 15	250
Cestosis	4 / 6	150
Internal: Acidosis	0 / 11	
Gastroenteritis	10 / 33	330

CONCLUSIONS

The number of SG in Slovenia is increasing, therefore the responsibility of the veterinary service at each level will increase. More rams and male goats are obliged to be under prescribed health control before mating. The veterinary-sanitary control of domestic transport as prevention of the spread of contagious diseases has to increase. Hygiene and veterinary hygiene control of food of SG origin at farms and farm guesthouses have been deficient, owners have not considered the legislation, a lot of products have been sold and consumed without hygiene control by the AHCS. This situation should be improved. Owners of SG must get adequate education about SG health and reproduction management, how to ensure the suitable hygiene of food of SG origin and respect current legislation.

REFERENCES

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4. Regulation on implementation of preventive measures for detection and prevention of infection animal diseases, OJ RS 6/96 and 16/97.
5. Regulation on the classification of infectious animal diseases on determining the manner and procedure of reporting and on determining laboratory facts and methods, OJ RS 29/96 and 54/96.

ЗДРАВЈЕТО, РЕПРОДУКЦИЈАТА И КОНТРОЛА НА ВЕТЕРИНАРНАТА ХИГИЕНА НА ОВЦИТЕ И КОЗИТЕ И НИВНИТЕ ПРОДУКТИ ОД СТРАНА НА ЗДРАВСТВЕНИТЕ ЦЕНТРИ ЗА ЖИВОТНИ ВО СЛОВЕНИЈА ВО 1996 И 1997

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Презентирани се ветеринарната дејност и контролата на здравјето, репродукцијата и хигиенската контрола на овците и козите и нивните продукти од страна на Здравствениот центар за животни на Словенија во 1996 и 1997. Дојдено е до заклучок дека ветеринарно-санитарната контрола на животните од машки пол и хигиената на продуктите за човечка исхрана во гостинските простории на фармите не се на задоволително ниво.

Клучни зборови: ветеринарна дејност, овци, кози

Скрашеници: АХЦС= Здравствен центар за животни на Словенија,
ПВП= приватни ветеринари, ВИС= Ветеринарен институт на Словенија,
СГ= овци и кози