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Surveillance Programmes – Summary of results 2016

Veterinærinstituttet
Norwegian Veterinary Institute

Surveillance Programmes – Summary of results 2016

Innhold

Authors
Merete Hofshagen, Ståle Sviland, Anne-Gerd Gjevre, Mona Torp

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Background

In Norway, there is extensive active surveillance regarding terrestrial and aquatic animal diseases, feed- and food safety. Data from these official surveillance programmes is basis for the evaluation of occurrence of disease in a population, and documents that Norway complies with legal commitments in relation to international agreements. The programmes contribute to healthy animals and safe food, and document the Norwegian status in these areas. The Norwegian Food Safety Authority is responsible for deciding which programmes to finance, and for the majority of surveillance programmes, the Norwegian Veterinary Institute assists with planning, analyses and reporting.

This summary report presents results from the surveillance programmes coordinated by the Norwegian Veterinary Institute, except results from three programmes; "NORM-VET» (antimicrobial resistance and usage), «Health monitoring of wild anadromous salmonids», "*Aphanomyces astaci*" and «Resistance to chemotherapeutants in salmon lice». The results from these programmes are not easily presented in such a summary report.

The results from all programmes are presented in detail in the annual reports, which can be found at www.vetinst.no.

Fish

Table 1. Results for 2016 for programmes regarding aquatic animal health.

Category	Programme	Positive	Analysed*
Salmonids - farmed	VHS (viral haemorrhagic septicaemia) - salmon	0	45 sites**
	VHS (viral haemorrhagic septicaemia) - rainbow trout	0	37 sites**
	IHN (infectious haematopoietic necrosis) - salmon	0	42 sites (216 ind.)
	PRV*om* (Virus Y) - salmon	0	0
	PRV*om* (Virus Y) - rainbow trout	9 sites	19 sites (504 ind.)
	PD (pancreas disease)	0	22 sites (3 073 ind.)
	HPR-del ISAV*** in ISA free zones - salmon	0	33 sites (9 131 ind.)
	HPR-del ISAV *** in ISA free zones - rainbow trout	0	2 sites (24 ind.)
	Renibacterium. salmoninarum in ISAV free zones - salmon	0	23 sites (3 509 ind.)
	R. salmoninarum in ISAV free zones - rainbow trout	0	2 sites (64 ind.)
	Gyrodactylus salaris - hatcheries	0	79 sites (2 622 ind.)
Salmonids - wild	*Gyrodactylus salaris* - surveillance rivers	0	69 rivers (2 263 ind.)
	Gyrodactylus salaris - post treatment surveill. rivers	0	18 rivers (2 096 ind.)
	Gyrodactylus salaris - Tyrifjorden (2014+2015)	0	170 ind.

* Number of sites, rivers and/or individual fishes (ind.).
** A total of 581 individuals of salmon and rainbow trout tested.
*** HPR del ISAV: Only detection of HPR-del ISAV is given. In addition HPR0 was detected in six sites with salmon.

Food and feed

Table 2. Results for 2016 for programmes regarding food- and feed-safety.

Category	Programme	Positive	Analysed
Cattle	*Salmonella* - carcass swabs	0	3 012
Swine	*Salmonella* - carcass swabs	0	3 224
Poultry	*Campylobacter* - broiler flocks	175	2 262
Meat	*Salmonella* - crushed meat	2	3 011
Food	Radioactivity	5	547
Food and feed	GMO (genetically modified organisms)	2	129
Berries	*Salmonella*	0	104
	E. coli quantitative	0*	104***
Cheese	*Salmonella*	0	30
	Listeria monocytogenes	0*	184
	E. coli quantitative	0*	71
	E. coli pathogenic (STEC)	4	82
	Staph. enterotoxin	0	82
Cereals	Wheat and rye	**	151
Feed	Wet feed - dog (*Salmonella*, +++)	1 *Salmonella* +**	68
	Compound feed - dog (mycotoxins)	**	19
	Cereals (nycology, trichothecenes)	**	105
	Compound feed - ruminants (aflatoxin)	0	46
	Maize (aflatoxin)	2 (spor)	10
	Compound feed - swine (mycotoxins)	**	25

* Detection limit 10 CFU/g.
** It is not possible to state «positive» in a simple table.
*** 5 analyses per sample.

Terrestrial animals

Table 3. Results for 2016 for programmes regarding terrestrial animal health.

Category	Programme	Positive	Analysed*
Cattle	BVD (bovine virus diarrhoea) - bulk milk	0	1 181 herds
	EBL (enzootic bovine leukosis) - bulk milk	0	1 180 herds
	IBR (infectious bovine rhinotracheitis) - bulk milk	0	1 179 herds
	BVD (bovine virus diarrhoea) - suckler cows	0	1 334 herds (4 245 ind.)
	EBL (enzootic bovine leukosis) - suckler cows	0	1 337 herds (4 241 ind.)
	IBR (infectious bovine rhinotracheitis) - suckler cows	0	1 330 herds (4 211 ind.)
	Brucella abortus	0	62 herds (147 ind.)
	Bluetongue	0	526 herds
	Tuberculosis	0	3 ind.
	Paratuberculosis	0	92 herds (457 ind.)
	BSE (bovine spongiform encefalopathy)	0	6 927 ind.
	Schmallenbergvirus - bulk milk	44	468 herds
	Schmallenbergvirus - animals with abortions	1	62 herds
	Salmonella - lymph nodes	0	3 137 ind.
Sheep	Paratuberculosis	0	40 herds (2350 ind.)
	Brucella melitensis	0	3 492 herds (9 821 ind.)
	Maedi	0	3 504 herds (9 858 ind.)
	Foot rot	0	83 herds (186 ind.) (120 000 inspected at slaughter)
	Scrapie	13	16 383 ind.
Sheep/goat	CAE (caprine arthritis encephalitis)	1 herd	5 herds (140 sheep+18 goats)
Goat	Paratuberculosis	0	118 herds (1 113 ind.)
	Brucella	0	86 herds (2 313 ind.)
	Scrapie	0	463 ind.
Camelides	Tuberculosis	0	11 ind.
	Paratuberculosis	0	203 herds (686 ind.)
	Psoroptes ovis	4 herds (6 ind.)	234 herds (906 ind.)
Swine	AD (Aujeszkys disease)	0	564 herds (3 824 ind.)
	TGE (transmissible gastroenteritis)	0	
	PED (porcine epidemic diarrhoea)	0	
	PRCV (porcine respiratory coronavirus)	0	
	PRRS (porcine respiratory and reproductive syndr.)	0	
	Influenza A (H1N1pdm09 - pandemic influenza)	48 % of herds	
	MRSA	1	872 herds
	Salmonella - herds	0	89 herds
	Salmonella - lymph nodes	1	3 262 ind.
Poultry**	ILT (infectious laryngotracheitis) - broilers	0	79 flocks (2 370 ind.)
	ILT (infectious laryngotracheitis) - layers	0	19 flocks (570 ind.)
	ART (avian rhinotracheitis)	0	48 flocks (1 433 ind.)
	AI (avian influenza)	0	218 flocks (2 534 ind.)
	Salmonella - breeding flocks	0	182 flocks
	Salmonella - non breeders	3	5 815 flocks
Fur animals	Mink - MRSA	0	121 herds
Wildlife	Cervides - CWD (chronic wasting disease)	5	10 152 ind.
	Cervides - Tuberculosis	0	0
	Fox, wolves, raccoon dog - *Echinococcus multilocularis*	0	575 foxes, 8 wolves
	Fox - *Angiostrongylus vasorum*	2	134 ind.
	AI (avian influenza), wild birds	27 (0 HPAI)	358 ind.
	Salmonella, wild birds	1	65 ind.
	Paramyxovirus, wild birds	0	358 ind.

* * Number of herds, flocks and/or individual animals (ind.).
**The programme on *Campylobacter* in broilers is presented in Table 2.

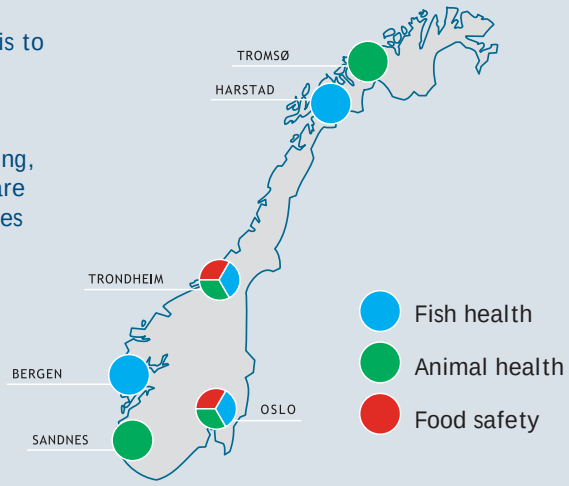
Scientifically ambitious, forward-looking and cooperatively oriented – for integrated health

The Norwegian Veterinary Institute is a national research institute that operates in the fields of animal and fish health, food safety and feed hygiene; its primary task is to provide the authorities with independently generated knowledge.

Emergency preparedness, diagnostic services, monitoring, reference functions, consulting, and risk assessments are all important areas of activity. Our products and services include research results and reports, analyses and diagnoses, studies and advice.

The Norwegian Veterinary Institute's central laboratory and administration lie in Oslo, and we operate regional laboratories in Sandnes, Bergen, Trondheim, Harstad and Tromsø.

The Norwegian Veterinary Institute collaborates with a large number of national and international institutions.



Fish health

Animal health

Food safety

Oslo	Trondheim	Sandnes	Bergen	Harstad	Tromsø
postmottak@vetinst.no	vit@vetinst.no	vis@vetinst.no	post.vib@vetinst.no	vih@vetinst.no	vitr@vetinst.no

www.vetinst.no

Veterinærinstituttet
Norwegian Veterinary Institute