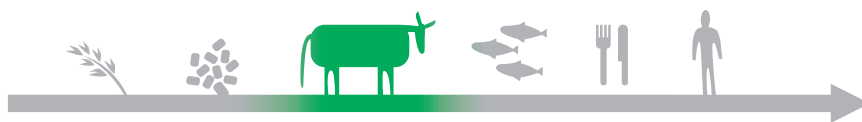
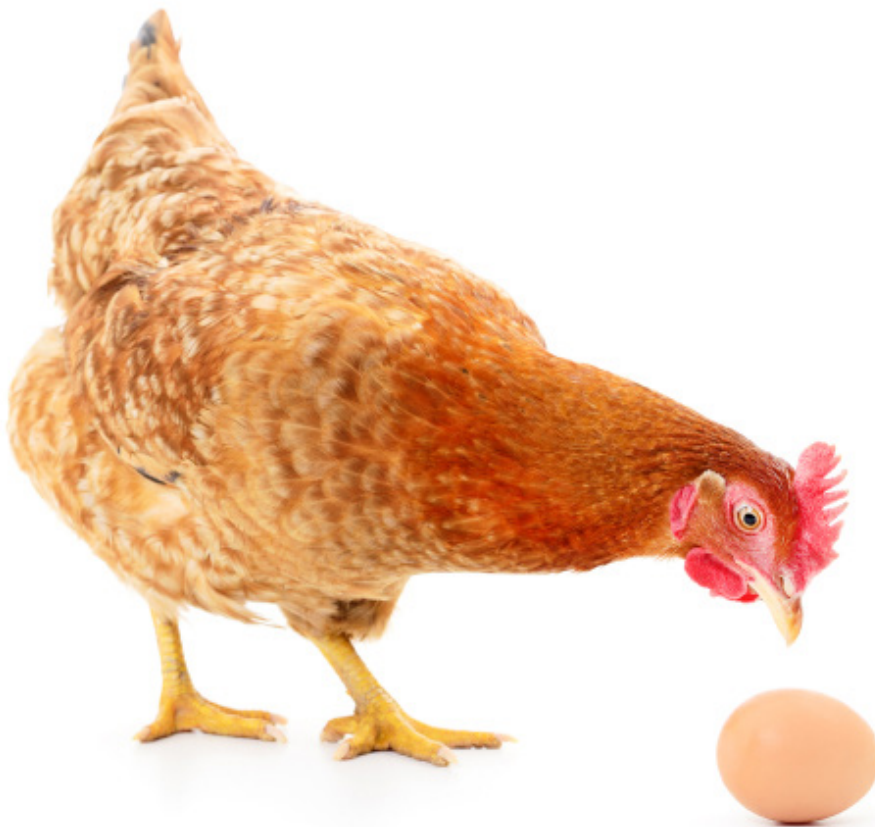


The surveillance programme for infectious laryngotracheitis (ILT) and avian rhinotracheitis (ART) in poultry in Norway 2017



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The logo of Mattilsynet, featuring a red rectangle with white circles above the text.

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Content

Summary	3
Introduction	3
Aims	3
Materials and methods	3
ILT	3
ART	3
Results and Discussion	4
References	4

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Summary

Surveillance in 2017 did not detect infectious laryngotracheitis or avian rhinotracheitis in poultry in Norway.

Introduction

The Norwegian Food Safety Authority is responsible for the implementation of the surveillance programmes for infectious laryngotracheitis (ILT) and avian rhinotracheitis (ART) in chicken and turkey flocks, respectively. The programmes, which were started in 1998, are based on serological investigations in poultry. The Norwegian Veterinary Institute in Oslo is responsible for the planning, laboratory investigations and the reporting components of the programmes.

ILT is a severe respiratory disease in chickens, caused by gallid herpesvirus 1 (ILT virus (ILTV)). The disease is common in commercial chickens in most parts of the world, including most European countries (1). ILT has not been diagnosed in commercial chicken flocks in Norway since 1971, however, clinical outbreaks of ILT have occurred sporadically in Norwegian hobby flocks since 1998 (2).

ART is a highly contagious infection that affects the upper respiratory passages of poultry. The disease is caused by avian metapneumovirus (aMPV), and has been diagnosed in most countries (1) and sporadically in our neighbouring countries. ART had never been diagnosed in Norwegian poultry until the national surveillance programme for ART demonstrated the presence of antibodies against aMPV in one broiler breeder farm in 2003 and in one layer breeder farm in 2004. Like in many other countries diagnosis of ART in these flocks was based on serology only. (1). As the use of stamping out measures was unable to control the spread of the infection, chickens have been excluded from the national surveillance programme for ART since May 2005.

Aims

The aim of the national surveillance programme for ILT in chickens and ART in turkeys is to document that the respective commercial poultry populations in Norway are free of these infections, and to contribute to the maintenance of this status.

Materials and methods

According to the national regulations for certification of poultry breeding farms (3), blood samples from 60 birds are taken at least once a year from every breeding flock. The blood samples are tested for antibodies against Newcastle disease, since Norway is a non-vaccinating country. Thirty of the 60 samples from chicken and turkey flocks are included in the national surveillance programmes for ILT and ART, respectively. In addition, forty randomly selected turkey flocks are sampled for ART at slaughter.

ILT

An indirect ELISA-test from IDvet (ID Screen® ILT indirect) was used to detect antibodies against ILTV. In cases of positive results, the flock was resampled after 10-14 days with at least 30 new samples. If clinical signs of disease were absent in the flock, and all resampled animals were negative for antibodies against ILTV, the flock was concluded as negative for antibodies against ILTV.

ART

All serum samples were tested for specific antibodies against aMPV using a blocking-ELISA produced by SVANOVA (Avian Pneumovirus (APV-Ab) SVANOVIR®). In cases of positive results, the flock was resampled after 10-14 days with at least 30 new samples. If clinical signs of disease were absent in the flock, and all

resampled animals were negative for antibodies against aPMV, the flock was concluded as negative for antibodies against aPMV.

Results and Discussion

Table 1 shows the number of farms, flocks and birds tested in 2017. Besides the surveillance programme, samples taken for diagnostic purposes and the control of imported poultry were also screened for antibodies against ILT and ART.

Antibodies against ILT are detected regularly in samples from hobby poultry flocks. Because registration of hobby flocks in Norway is optional, the exact number and location of the Norwegian hobby poultry population is not known, which makes systematic disease surveillance impossible. It is thus of major importance that commercial poultry flocks are kept strictly isolated from hobby poultry flocks.

All commercial flocks sampled in the surveillance program in 2017 were negative for antibodies against ILTV and aMPV.

Table1. Number of farms, flocks and birds tested in the surveillance programmes for infectious laryngotracheitis (ILT) in chickens and avian rhinotracheitis (ART) in turkeys in 2017.

Disease - production line	Total numbers tested			Flocks with seropositive samples
	Farms	Flocks	Birds	
ILT - Broilers	77	88	2 640	0
ILT - Layers	11	13	390	0
ART - Turkey	47	50	1 500	0

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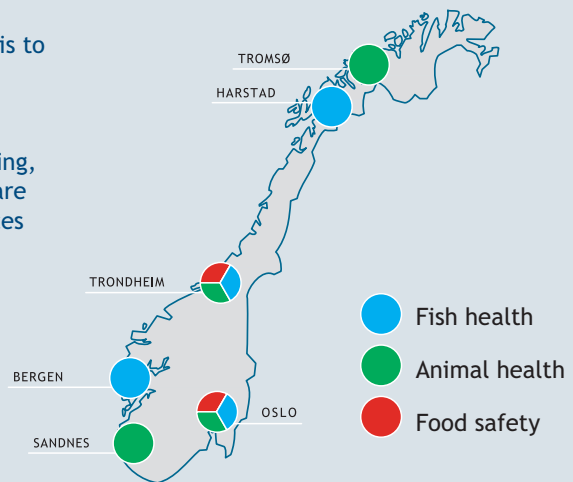
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