



Update on the current Avian Influenza situation and the development of vaccines

In Europe, an unprecedented number of premises have been confirmed for high pathogenicity avian influenza virus infection during the years 2021-2023, including significant amount of submission from exotic breed poultry holders. According to the European Centre for Disease Prevention and Control, the highly pathogenic bird flu epidemic observed in 2021-2022 is so far the largest observed in Europe, with 37 countries affected and millions of birds culled. It caused a devastating effect on poultry holders' wellbeing, government trading policies, the agriculture economy, and the welfare of animals.

Due the prevalent presence of the virus and large mortality events related to it within wildlife population, the virus still poses a significant threat for backyard poultry holders. As the vaccine enrolment process takes time, and the virus detection in many species frequently occurs worldwide, France and Netherlands decided to act against Avian Influenza outbreak.

Wageningen Institute in Netherland has tested 4 vaccines against current field avian influenza. This trial revealed that two of the four vaccines tested for their efficacy against highly pathogenic avian influenza are 100% effective under laboratory conditions, and healthy birds did not show any signs of disease. According to Dr Nancy Beerens, head of national reference laboratory for Avian Influenza and Newcastle Disease in Netherland, the so- called (HVT) – H5 vaccines offered protection against disease symptoms in laying hens and prevented the spread of the virus.

French Agency for Food, Environmental and Occupational Health & Security (ANSES) aims to help the public authorities by establishing a vaccination strategy to decrease impact of this disease. To accomplish this goal, France has mandated two companies to develop bird flu vaccines for ducks. According to one of them, initial results are "very promising", notably by sharply reducing the excretion of the virus by infected birds. Currently, only one inactivated vaccine for chickens has marketing authorisation in France. This vaccine contains an inactivated avian influenza virus, which means the virus has been killed, therefore cannot cause the disease. At present, more products to vaccinate against bird flu have been submitted to French Agency (ANMV) and European Medicines Agency (EMA) to receive temporary or permanent marketing authorisation.

Different control measures are applied against AI in different European countries. In one country it is therefore possible to show animals and in another not or only partially. Especially when you compare control measures between countries we hope they become less strict. Nevertheless it will take some time before vaccination is part of a practical solution so that AI-sensitive bird species can be shown again in all EE countries.