

# Adia<sup>X</sup> - AIV Real Time Vet

ADI283\_531-AIV\_PP01\_(EN)\_V02  
27/06/2023

## WORLDWIDE CONTEXT OF THE DISEASE

Avian influenza viruses (AIV) belong to the Influenzavirus A genus of the *Orthomyxoviridae* family. They are negative single stranded RNA viruses divided into subtypes based on two surface proteins: hemagglutinin and neuraminidase. As of today, 16 subtypes of hemagglutinin (H1-H16) and 9 subtypes of neuraminidase (N1-N9) are described.

AIV can cause severe diseases in domestic poultry, including chickens and turkeys but can also infect pheasants, quails, ducks, geese or wild birds...

AIV strains are defined as either low or highly pathogenic. An AIV strain is considered as highly pathogenic if one of these criteria is met:

- Determination of pathogenicity index by intravenous (IVPI) greater than 1.2
- Presence of an amino acid sequence of the cleavage site of haemagglutinin similar to a sequence already observed for highly pathogenic IA isolates

H5 and H7 subtypes (either low or highly pathogenic) have to be notified to the OIE.

## THE NEW ANIMAL HEALTH LAW REGULATORY IMPACT (AHL):

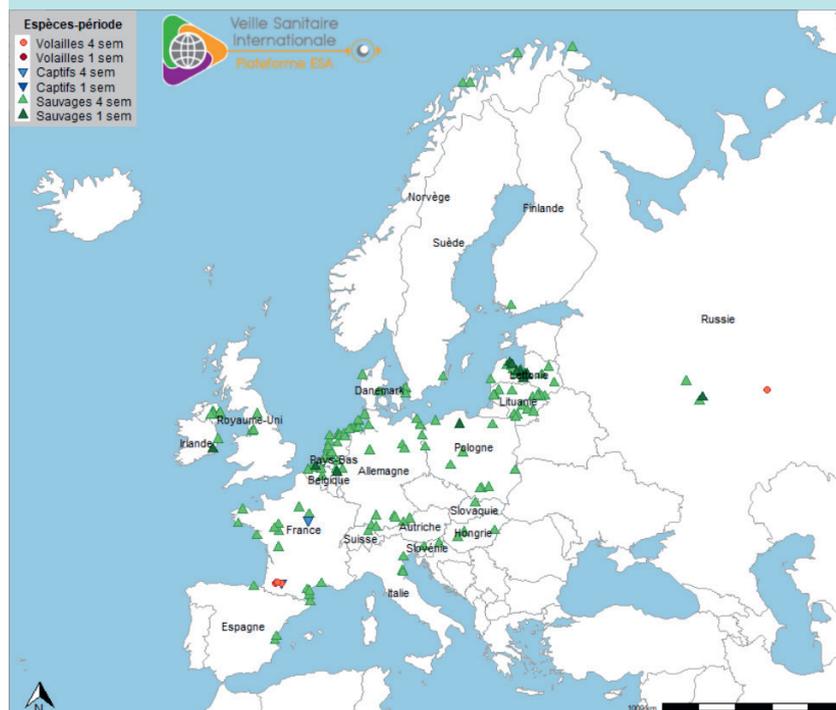
Commission Implementing Regulation (EU) 2018/1882 lays down rules for the application of AHL with regards to diseases classification (ABCDE). According to Commission Delegated Regulation (EU) 2020/687 which establishes measures for early detection and eradication of important diseases not present in EU, highly pathogenic AIV is classified as a category A disease. On the other hand, low pathogenic AIV are classified in Category D disease according to Commission Delegated Regulation (EU) 2020/688 which means that diagnostic and preventing measures to avoid spreading need to take place.

**Real-time PCR is a convenient, fast (same-day results) and highly sensitive method allowing AIV screening and H5/H7 sub-typing.**

**Location of HPAI H5 cases or outbreaks in wild birds, captive birds and poultry in Europe that started in the month and week preceding 25/06/2023 included**  
(source: ADIS European Commission, WAHIS-OMSA, viewed on 23/06/2023).

Extracted from the Weekly Bulletin of International Animal Health Surveillance of 27/06/2023, ESA Platform.

## A RECURRING AND WORRYING EPIZOOTIE



« ADIAVET™ AIV Real Time is validated by French LNR ANSES for a quick and official diagnosis according to the new AHL standard. »

# CHARACTERISTICS OF ADIAVET™ REAL TIME PCR KITS FOR THE DETECTION OF AVIAN INFLUENZA VIRUS

## Two different RT PCR kits and a common extraction protocol

- ADIAVET™ AIV REAL TIME, type A Influenza Virus **gene M** detection (RT-PCR duplex)
- ADIAVET™ AIV H5-H7 REAL TIME, **H5 and H7 AIV sub-types** detection (RT-PCR triplex)
- ADIAMAG™, magnetic beads extraction kits / compatible with KingFisher

## RT-PCR DUPLEX AND TRIPLEX KITS VALIDATED BY FRENCH REFERENCE LABORATORY ANSES

	ADIAVET™ AIV REAL TIME	ADIAVET™ AIV H5-H7 REAL TIME
FAM	AIV gene M*	AIV sub-type H5**
CY5		AIV sub-type H7**
HEX	Endogenous internal control	Endogenous internal control

\*This test kit is not registered yet in Germany.

\*\* These test kits are not registered in Germany.

## AIV and H5-H7 extraction positive control (sentinelle)

- Calibrated between 10 and 100 LD<sub>method</sub> it can be routinely used with the two RT-PCR kits for 100 series of extraction; available upon request.

## REFERENCES

- **Animal Health Law (AHL) EU 2016/429 (Article 9, paragraph 1, points (a) and (d))**
- Commission Implementing Regulation (EU) 2018/1882
- Commission Delegated Regulation (EU) 2020/687 of 17 December 2019
- Commission Delegated Regulation (EU) 2020/688

## TO PLACE AN ORDER :

Code	Designation	Nb. of reactions
ADI283-100	ADIAVET™ AIV REAL TIME	100
ADI283-500	ADIAVET™ AIV REAL TIME	500
ADI531-100	ADIAVET™ AIV H5-H7 REAL TIME	100
NADI003	ADIAMAG™ (magnetic beads extraction kit)	200
ADI283-531-8	Extraction positive control (sentinelle)	on request

