

HPAI passive serological surveillance in wild birds within the OH4Surveillance project

Inhalt

One Health for Surveillance (OH4Surveillance) is a three-year EU4Health-funded initiative aimed at strengthening zoonotic disease surveillance through a One Health approach. Since 2024, Belgium has participated in a consortium of 11 countries coordinated by Denmark.

This study integrated serosurveillance into the monitoring of highly pathogenic avian influenza (HPAI) by serologically testing wild birds submitted between July 2024 and March 2026 within the EU-mandated routine passive virological surveillance program. The objective was to identify silent viral circulation and past infections. As blood collection is often not feasible in deceased birds, spleen tissue was evaluated as an alternative serological matrix.

Samples were analysed using competitive NP- and H5-ELISAs. ELISA-positive samples were subsequently tested by haemagglutination inhibition (HI) assays.

Of the 128 samples analysed, 69 were ELISA-positive (53.9%), including 30 dual-positive (NP+/H5+), 13 NP-positive only, and 26 H5-positive only. Five ELISA-positive samples lacked sufficient material for HI testing. Among the remaining 64 samples, 31 (48.4%) showed positive H5-specific HI responses.

These findings demonstrate that integrating serosurveillance into routine HPAI surveillance enhances the detection of silent viral circulation and previous infections that would otherwise remain undetected.

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INF26- 33

Professional status of the speaker

Graduate student

Junior scientist status

No, I am not a junior scientist.

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