

Prevent More. Spend Less.

Cost-Effective Surveillance Testing for Avian Influenza Risk Reduction

A smarter surveillance system can protect flocks and finances.

With Alveo Sense™ Poultry Avian Influenza Test, governments and organizations gain faster detection, faster response times, decreased response costs, and a measurable return on disease prevention. Preventing a percentage of avian influenza outbreaks annually can offset the cost of running a full scale surveillance program.

Economic Impact of National Surveillance

Country X¹ has a structured national vaccination program

- Total population: 891M commercial poultry
- Annual Testing recommendation via Alveo Sense™: 47,000 tests (2 tests per house)

The cost saved by avoiding only 4 outbreaks to a government, would pay for 1900 Alveo Sense Poultry Avian Influenza monitored flocks.

65 outbreaks² per year prevented would cover the entire cost of a surveillance testing program.



¹ Data reflects French commercial populations between 2022 and 2023

² ECDC Reported 191 H5 2.3.4.4.b clade outbreaks in France from Dec 2022-March 2023

The Impact of Delays

With laboratory-based PCR, a 3–4+ day delay between sampling and results creates a potentially dangerous window:

- Infected flocks may be processed and transported while still incubating the virus
- Risk of environmental spread through dust, crew, or vehicles
- Biosecurity exposure increases with each shipment from farm to farm
- In dense poultry regions, one missed infection can trigger a cascade

Just 4 outbreaks cost a country over €500k³ in direct depopulation costs alone. This represents just ~30% of the total societal cost per outbreak.⁴

The culling of 21 million birds due to Avian Influenza outbreak in 2022 Cost France 1.5B Euro.

Average Depopulation Cost⁵

Response Expense ⁶	Amount	Calculation	Cost
CO2 Euthanization	24 Ton CO2	470 €/Ton	11,280 €
Catching	50,000 Birds	.045 €/Bird	2,250 €
Incineration	115 Ton of Bird	50 €/Ton	5,750 €
Cleaning & Disinfecting	2 Houses	Fixed	2,500 €
Lost income		Fixed	12,500 €
Stand Still Cycle		Fixed	12,500 €
Total Added Cost			46,780 € *
Bird Cost (D35)	50,000 birds	1.77 €/Bird	88,500 €
Total Cost (added + bird)			135,280 € *

* per farm per outbreak

3 Netherlands Data – H7 HPAI outbreaks 2003

4 Based on historical data the actual financial impact is significantly higher when including trade losses, food supply disruption, and farm recovery.

5 Calculation for Broiler Population

6 Recommended volumes and costs aggregated from published research via US and European Union institutions.

Alveo Sense™ Poultry Avian Influenza Test enables a smarter surveillance program by **reducing the “diagnostic delay gap” from days to under 1 hour.**

- ✓ Test runs on-site in under 1 hour
- ✓ Fewer infected flocks processed
- ✓ Decreased depopulation and containment costs

Efficiency & Infrastructure Advantages of Alveo Sense™

Minimal infrastructure or investment:

- Analyzer (reusable) and cartridges are cloud-connected via secure Alveo Sense™ smartphone app
- Reduces opportunity for documentation errors via QR-code capture and cloud reporting
- No lab scheduling delays or sample transport bottlenecks

Alveo Sense™ Poultry Avian Influenza Tests provides organizations with a cost-effective tool for large-scale surveillance testing. A solution that delivers *efficiency* and *economic resilience*.

Contact us to explore program modeling specific to your needs → sales@alveotechnologies.com