

Risk of Avian Influenza Incursion into the Gamebird Sector via Designated Hatchery

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Background and objectives

Every year, gamebird farms raise and release approximately 30-35 million birds for shooting in Great Britain. Despite the size of the industry, not much information is available on the potential risk of High Pathogenic Avian Influenza (HPAI) incursion into the gamebird sector.

Two veterinary risk assessments were produced to inform policymakers on:

1. The risk of HPAI introduction into the gamebird sector through movements of hatching eggs to designated hatcheries.
2. The risk of onward transmission of HPAI from a designated hatchery to gamebird rearing farms through movements of day-old chicks.

Hatchery designation

Council Directive 2005/94/EC

On confirmation of disease:

- A **Protection zone (PZ)** of minimum radius 3km and **Surveillance zone (SZ)** of minimum radius 10km are implemented, which place restrictions on movements of birds/eggs.
- Hatcheries must be designated if they are located in PZ/SZ and intend to accept eggs and send day-old chicks from/to other premises.
- Hatcheries must be designated if they are located in a free zone and receive hatching eggs from poultry flocks located in PZ/SZ.
- Movement licences are required if poultry/eggs are to be moved within / between the zones.

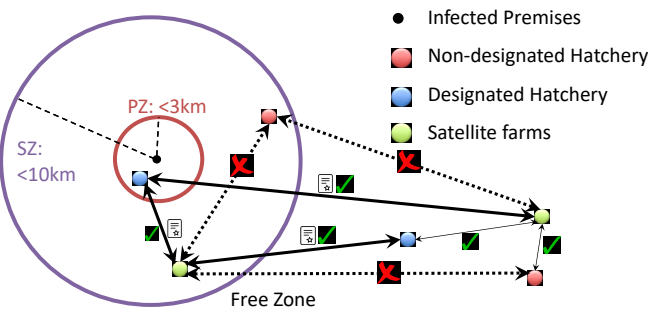


Figure 1. Prohibited, licenced and unaffected movement of eggs and day-old chicks during AI outbreaks within and between disease control zones

Gamebird farm structure

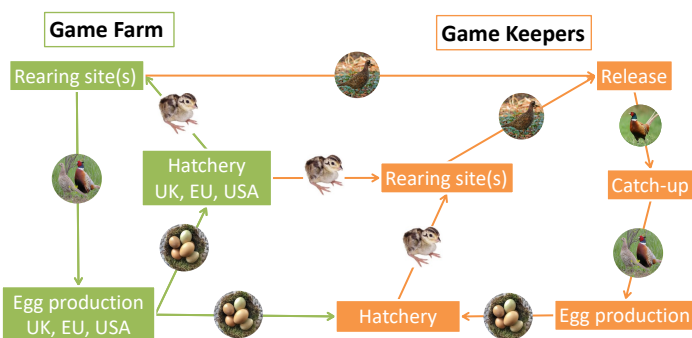


Figure 2. Gamebird industry structure and associated movement of birds, day-old chicks and hatching eggs

Gamebird facts

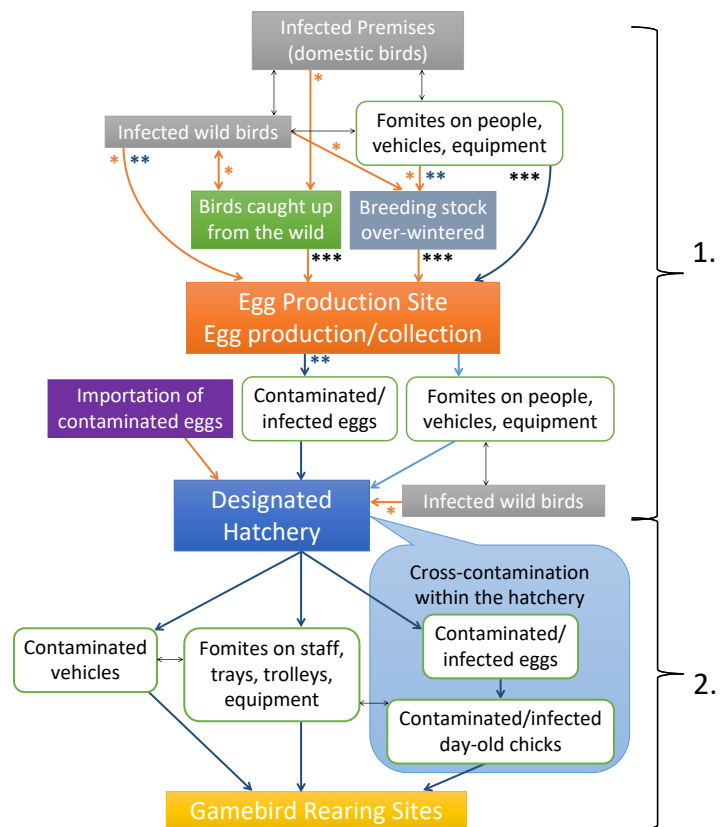
- 30-35 million gamebirds reared and released every year
- 300 game farms and 20,000+ gamebird premises in UK
- Most common species: Pheasants and Partridge (Galliformes)
- Susceptible to most of HPAI virus strains, no clinical signs but shed viruses



Methods

- 1) Understanding the structure of the gamebird sector in Great Britain
- 2) Identify risk pathways
- 3) Allocate risk levels for each risk pathway

Potential risk pathways of HPAI incursion into the gamebird sector via designated hatchery



Risk Level (DEFRA 2011, OIE 2004)

- Negligible:** so rare that it does not merit consideration;
Very Low: Very rare but cannot be excluded (↔);
Low: Rare but could occur (→); **Medium:** Occurs regularly (→);
High: Occurs very often; **Very High:** Events occur almost certainly
 * Premises located within PZ, ** same operator, *** non-HPAI virus strain

Figure 3. 1. Risk pathways from production sties and other sources to a designated hatchery, 2. Risk pathways of cross-contamination within the hatchery and movements of day-old chicks to rearing sites

Overall risks of AI incursion into the gamebird sector

1. From source farms to a designated hatchery – LOW
2. From a designated hatchery to rearing premises – LOW