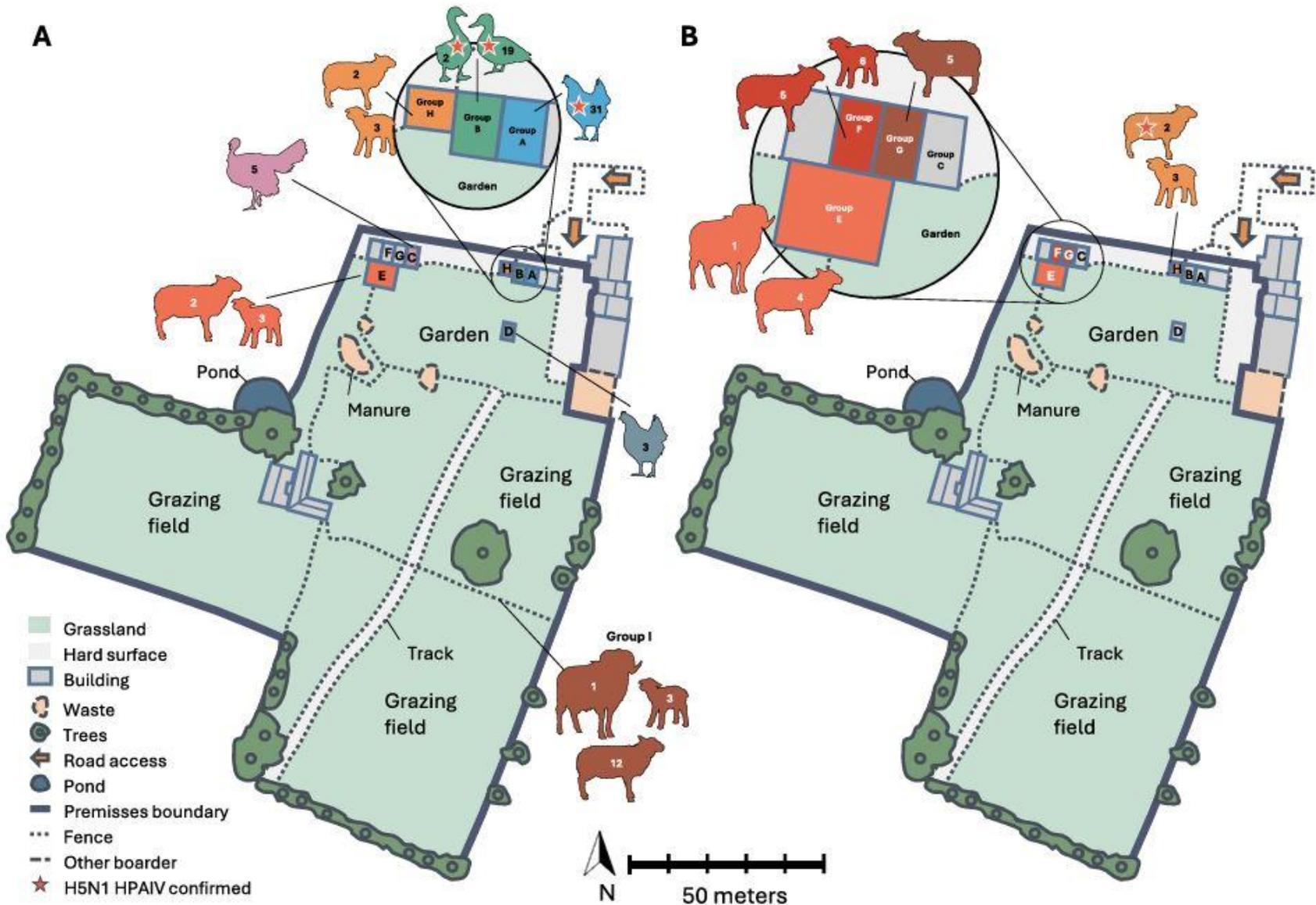


Case of Single Infected Sheep in England

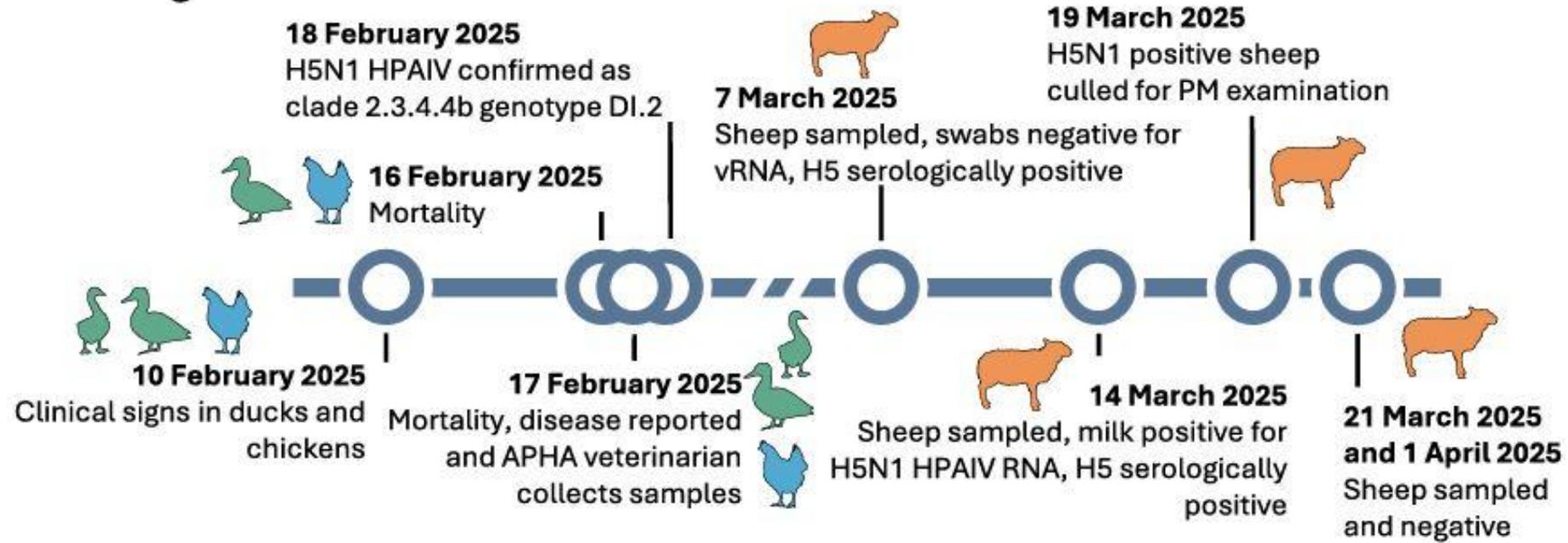
- Banyard A, et al. Detection of clade 2.3.4.4b H5N1 high pathogenicity avian influenza virus in a sheep in Great Britain, 2025. *Emerg Microbes Infect.* 2025 Sep 15;14(1):2547730. doi:10.1080/22221751.2025.2547730.

March 2025
Yorkshire England

Poultry(ducks, chickens, turkeys, geese) outbreak→routine surveillance on same farm→ewe w/mastitis-tested positive for HPAI H5N1=infection from environmental contamination due to adjacent housing w/infected ducks and chickens and poor biosecurity (one person, rats and leaky buildings)

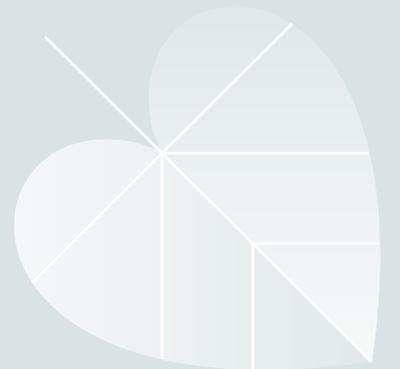
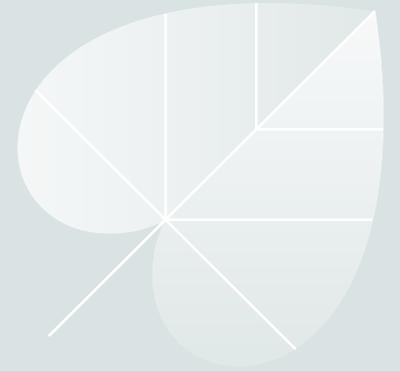


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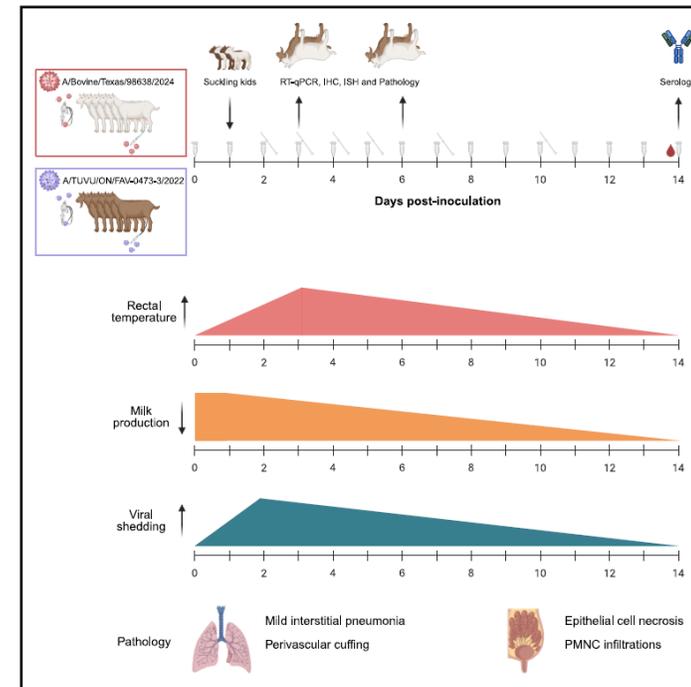
HPAI in Other Species

- Mammalian species living on an infected farm can become infected
- Example in Norway- found that 220 sheep grazed areas where dead and diseased H5N1-infected pheasants were, had antibodies against H5 AIV
- No reports of clinical disease in these sheep in Norway
- Suggests that spillover events may be more common than we know
- So risk to people could become very real as virus is so capable of adapting to new hosts



Dairy cow- and avian-origin clade 2.3.4.4b H5N1 induce severe mastitis in lactating goats and transmission to suckling goats

Graphical abstract



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In brief

Alkie et al. investigated the impacts of A(H5N1) from dairy cattle on other ruminants. The study shows that goats are highly susceptible to both bovine and avian strains, developing mastitis and shedding virus in milk and enabling transmission to offspring. Findings highlight the need for enhanced influenza surveillance in ruminant livestock.

Recent Research Publication

Highlights

- Cow- and avian-origin A(H5N1) caused severe mastitis in goats
- Infected goats shed viruses in milk, transmitting A(H5N1) to suckling kids
- Both viruses infected goat respiratory and mammary cells, which express sialic acid receptors
- Findings show underestimated A(H5N1) risk in ruminants, urging better livestock surveillance

FMD

*could be the most
expensive FAD*

Endemic across many parts of Asia, Africa, and the Middle East

Outbreaks reported in early 2025 in parts of Europe, including Hungary, Germany and Slovakia.

North America, Australia, New Zealand, and most of Western Europe remain free of the disease.

FMD Red Book

USDA publication designed to guide control plan of FMD outbreak in US



FMD Red Book

Provide Guidance on:

- Roles of Animal Health officials, incl. communication plans
- Diagnostic Testing
- Movement Standstill
- Quarantine Zones
- Permitted Movement
- Stamping Out & Vaccination Plans
- Herd Plans
- Surveillance
- Goal country-wide freedom from FMD virus

FMD Red Book

FMD Red Book Revisors:

- Meet every other Monday, for months!
- USDA-APHIS Staff
- State veterinarians (WY, FL, KS)
- Laboratory Diagnosticians
- Veterinarians representing Industry Groups (NCBA, ASI, NMF, Swine folks)
- Call in other experts as needed

FMD Preparedness

My concern is will we have enough trained people to deal with an outbreak?

- What will be the impact of size and expertise of APHIS staff? Speak up to your legislators and influencers.
- Are all states working on a state FMD plan?
- Go home and reach out to your state vet's office and tell them how important preparedness is to you and your industry.
- Plan yourself



SSWS
SECURE SHEEP
AND WOOL SUPPLY