

22 August 2023

Rt Hon Thérèse Coffey MP
Secretary of State

Rt Hon Mark Spencer MP
Minister of State
Department for Environment, Food and Rural Affairs

Dear Secretary of State, Dear Minister of State

The need for an action plan to halt bird flu

I attach Compassion in World Farming's new report *Bird flu: Only major farm reforms can end it*. I would be most grateful if we could have a meeting with you to discuss the report's recommendations.

There is a tendency to blame wild birds for bird flu. However, the Scientific Task Force on Avian Influenza - which includes the Royal Veterinary College, the UN Food and Agriculture Organisation and the World Organisation for Animal Health - stresses that wild birds are victims of highly pathogenic bird flu; they do not cause it.

A recent study states: "This panzootic did not emerge from nowhere, but rather is the result of 20 years of viral evolution in the ever-expanding global poultry population".¹

Until recently, the bird flu viruses that circulate naturally in wild birds were usually of low pathogenicity; they generally caused little harm to the birds. It is when it gets into industrial poultry sheds that low pathogenic avian influenza can evolve into dangerous highly pathogenic avian influenza. Industrial poultry production, in which thousands of birds are packed into a shed, gives a virus a constant supply of new hosts; it can move very quickly among the birds perhaps mutating as it does so. In this situation highly virulent strains are likely to rapidly emerge. The Scientific Task Force states that since the mid-2000s spillover of highly pathogenic bird flu from poultry to wild birds has occurred "on multiple occasions".

So, low pathogenic bird flu is spread from wild birds to intensive poultry where it can mutate into highly pathogenic bird flu, which then spills over to wild birds and can even spill back to poultry in a growing vicious circle.

Following its evolution in farmed poultry, the latest strain of the virus has adapted to wild birds, meaning that it is circulating independently in wild populations, with some outbreaks occurring in remote areas that are distant from any poultry farms.

Is there a health risk for humans?

While the health risk to humans from bird flu is low, it cannot be altogether ignored. Recently, highly pathogenic avian influenza has spread to mammals including otters, foxes, seals, dolphins and sea lions. Worryingly, it has spread to a Spanish mink farm where it then was able to spread from one infected mink to another. The ability for bird flu to move directly from one mammal to another is troubling as a pandemic could ensue if it could move directly from one human to another.

A July 2023 joint statement from the World Health Organisation, the UN Food and Agriculture Organisation and the World Organisation for Animal Health states: "Avian influenza viruses normally spread among birds, but the increasing number of H5N1 avian influenza detections among mammals - which are biologically closer to humans than birds are - raises concern that the virus might adapt to infect humans more easily. In addition, some mammals may act as mixing vessels for influenza viruses, leading to the emergence of new viruses that could be more harmful to animals and humans."²

Need for a coherent strategy to end bird flu

The Government appears to have no strategy for how to end these regular bird flu outbreaks other than biosecurity, stamping out and a hope that the outbreaks will eventually die down. But there is no sign of this happening. Without an exit strategy, we are likely to face repeated, devastating outbreaks of bird flu for years to come. We need a three-pronged action plan.

First, serious consideration must be given to vaccination. It involves difficulties but it could slow down the spread of the disease and reduce the risk of virus shedding and replication. Several countries including China, Mexico and Egypt vaccinate against bird flu and France is now beginning to vaccinate its large flock of farmed ducks.

Second, we need to:

- move to a poultry sector with smaller flocks and lower stocking densities so giving the birds more space. Transmission and amplification of bird flu would be much less likely in such conditions;
- end the practice of clustering a large number of poultry farms close together in a particular area as this aids the spread of bird flu. Indeed, between-farm spread is a major contributor to the transmission of highly pathogenic bird flu;
- end the use of birds genetically selected for very fast growth as such birds have impaired immune systems making them more susceptible to disease.

Third, pigs can be infected by avian influenza and human influenza viruses as well as swine influenza viruses. Pigs can act as mixing vessels in which these viruses can reassort (i.e. swap genes) and new viruses that are a mix of pig, bird and human viruses can emerge.³ This process appears to have been behind the 2009 swine flu pandemic.

A recent study concluded: "European swine populations host building blocks of pre-pandemic influenza viruses".⁴ Many of the samples in this study were from "regions of very intense pork production in Europe". The situation in UK pig herds may be similar. In light of pigs' capacity for acting as mixing vessels for human, avian and swine influenza viruses, the pig sector too needs to be restructured to make it less vulnerable to the transmission and amplification of influenza viruses. This would involve reduced stocking densities, smaller group sizes and avoiding clustering large numbers of farms in a particular area.

Yours sincerely

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¹ Klaassen M & Wille M, 2023. Wild birds' plight and role in the current bird flu panzootic

² FAO, WHO, WOA, 2023. Ongoing avian influenza outbreaks in animals pose risk to humans. Situation analysis and advice to countries from FAO, WHO, WOA. 12 July 2023 Statement Geneva/Paris/Rome. <https://www.who.int/news/item/12-07-2023-ongoing-avian-influenza-outbreaks-in-animals-pose-risk-to-humans>

³ Centres for Disease Control and Prevention https://www.cdc.gov/flu/swineflu/keyfacts_pigs.htm Accessed 12 April 2020

⁴ Henritzi *et al*, 2020. Surveillance of European Domestic Pig Populations Identifies an Emerging Reservoir of Potentially Zoonotic Swine Influenza A Viruses. *Cell Host & Microbe* 28, 1–14. <https://doi.org/10.1016/j.chom.2020.07.006>