



On the pandemic potential for influenza currently circulating among birds and mammals

The Global Virus Network (GVN) recommends that people in close contact with birds and mammals (wild or farmed) use personal protective equipment and get vaccinated against seasonal influenza.

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It is nearly impossible to predict if the currently spreading avian influenza will become even better adapted to mammals and spill over to people.

But influenza outbreaks among bird and mammal populations have led to an alarming rate of wild bird deaths and infections among an ever-growing list of sea and land mammals.

So GVN calls for public health officials, poultry and wildlife experts, and anyone interacting with bird and mammal populations to take the following precautions and recommendations. Doing so will reduce the threat of an influenza pandemic as well as aid animal health and welfare, wildlife conservation, and biodiversity.

- Use personal protective equipment when in close contact with potentially infected birds and mammals and get vaccinated against seasonal influenza.
- Take steps to eliminate contact between wild and farmed birds, house birds indoors, and keep geese and ducks separate from other poultry species (see (2), *all references below*)
- Explore additional preventative measures, such as DIVA (Differentiating Infected from Vaccinated Animals).
- Wherever possible, reduce farm size, farm density, and proximity to wildlife areas.
- Close live animal markets that do not have biosafety measures, such as veterinary inspection, isolation of symptomatic animals, quarantines, and reduced density of animals per cage.
- Enhance surveillance (active and passive when possible) of wild and farmed mammals and wild birds, in addition to poultry.
- Monitor people potentially exposed to infected birds and mammals, and explore treatment options (e.g., antivirals).
- Help monitor for the presence of mutations of concern by ensuring complete genome viral sequences are both created from infected wildlife, poultry, and people, and then shared publicly in a timely way.
- Encourage and support research on universal influenza vaccines.

The GVN ([GVN.org](http://www.GVN.org)) is a worldwide network of virologists committed to solving viral challenges facing humanity. Those challenges include threats to global food security and to people whose livelihoods depend on the poultry market.

Currently, avian influenza is devastating poultry markets in some locations. But the disease is worldwide and independent of season, and so now is classified as a “panzootic,” or a pandemic among animals.

Although highly pathogenic avian influenza viruses (HPAIVs) have been circulating for decades, reports since October 2021 showed an unprecedented number of infections (H5N1 Gs/GD* clade 2.3.4.4b) in wild birds, poultry, and domestic and wild mammals worldwide(3,7).

Previous research has shown that just a few mutations of these HPAIVs can lead to mammal-to-mammal transmission(4,5).

In October 2022, investigations of a HPAIV infection in farmed minks indicated mink-to-mink transmission within the affected farm(1).

So it is critical to increase and intensify efforts—as recommended above—both to prevent HPAIVs from becoming a future epidemic or pandemic and, should that fail, to prepare for the consequences(6).

Note:

*Gs/GD: A/goose/Guangdong/1/1996 lineage H5N1 HPAIV

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