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Ask The Pharmacist: Bird Flu and Its Growing Impact on Public Health

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How serious is the threat of bird flu in North America?

Bird flu, or avian influenza, is an emerging public health and industry concern across North America. While the virus primarily affects birds, it can occasionally spread to humans—raising important questions around occupational exposure and public health safety.

The Current State of Bird Flu in North America

Since early 2022, the highly pathogenic avian influenza (HPAI) virus, specifically the H5N1 strain, has impacted both wild and domestic bird populations across the United States and Canada.

As of April 2025, the [U.S. Department of Agriculture](#) (USDA) has reported outbreaks in all 50 states, affecting over [58 million birds](#). This marks the largest animal health emergency in U.S. history, with Iowa, Minnesota and California hit hardest. Mass culling (the process of selectively removing animals from a group or population) and trade restrictions have led to major economic losses in the poultry sector, including a sharp increase in [egg prices](#).

Occupational Exposure and Human Health Risks

Although bird flu primarily affects avian species, it poses risks to those [working in close contact](#) with infected birds—such as poultry farm workers, veterinarians and wildlife professionals.

Since 2003, the [World Health Organization](#) (WHO) has reported 954 human cases of H5N1 globally, including [464 deaths](#)—mostly in Asia. In North America, risk to humans remains low but significant.

The first U.S. human case of H5N1, confirmed in a [Colorado poultry worker](#) in 2022, underscored the importance of safety protocols in high-risk environments.

Mitigating Risks of Human Transmission

To reduce the risk of human transmission, health authorities and industry stakeholders have implemented various strategies:

1. **Personal Protective Equipment (PPE):** Workers in high-risk environments are required to wear appropriate PPE, including respirators, goggles, gloves and protective clothing.
2. **Biosecurity Measures:** Strict biosecurity protocols have been implemented on poultry farms, including restricted access, disinfection procedures and proper disposal of potentially contaminated materials.
3. **Surveillance and Monitoring:** Enhanced surveillance systems have been put in place to detect and respond quickly to potential human cases of bird flu.
4. **Vaccination:** While there is currently no commercially available vaccine for the circulating H5N1 strain, research is ongoing to develop effective vaccines for both livestock and humans.
5. **Education and Training:** Workers in high-risk occupations receive comprehensive training on recognizing symptoms, implementing safety measures and reporting potential cases.

Decreasing the Spread Among Birds

Efforts to control the spread of bird flu among avian populations are crucial for protecting both animal and human health. Key strategies include:

1. **Culling Infected Flocks:** When bird flu is detected in a flock, the standard practice is to humanely cull all birds to prevent further spread.
2. **Enhanced Biosecurity:** Poultry farms have implemented stringent biosecurity measures, including restricted access, disinfection protocols and isolation of new birds.
3. **Wild Bird Monitoring:** Surveillance of wild bird populations helps track the spread of the virus and provides early warning for potential outbreaks in domestic flocks.
4. **Movement Restrictions:** Authorities have imposed restrictions on the movement of poultry and poultry products from affected areas to limit the spread of the virus.
5. **Vaccination Programs:** Some countries have implemented vaccination programs for poultry, although this approach is not universally adopted due to concerns about masking infections and trade implications.

While the risk of human transmission remains relatively low, the potential impact of a wider outbreak is significant. Ongoing prevention, education and surveillance are critical. Enlyte's clinical team will continue to monitor real-world data on the most recent bird flu outbreak, helping stakeholders stay informed and prepared.

This information is meant to serve as a general overview, and any specific questions should be fully reviewed with a health care professional such as the prescribing doctor or dispensing pharmacist.

Do you have a workers' compensation or auto-related pharmacy question? Send us an email at AskThePharmacist@enlyte.com.

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