

Highly Pathogenic Avian Influenza

May 2024

IDSA represents more than 13,000 physicians, scientists, public health practitioners and others, many of whom are tracking and responding to the current outbreak of highly pathogenic avian influenza (HPAI).

IDSA appreciates the coordinated approach of multiple federal agencies and their partnership with professional societies. Below, IDSA offers key considerations for the ongoing response to HPAI, which underscore the need for robust and ongoing resources to support outbreak preparedness and response, including our public health infrastructure, biomedical research enterprise and infectious diseases (ID) workforce.

One Health Perspective

As the current outbreak of HPAI has spread to cattle with isolated incidents of human infection, a One Health perspective is critical to protecting animal, human and ecological health. Continued collaboration between relevant federal agencies responsible for animal and human health will facilitate an effective response to this virus. A One Health approach is also important for pandemic preparedness. Accurate, timely surveillance data from animals and people are critical to effectively respond and plan for potential scenarios of more widespread animal-to-human and/or human-to-human transmission.

Epidemiology and Surveillance

There is much about the transmission of HPAI among animals and to humans that is still unknown. Because H5N1 noninfectious viral particles have been found in pasteurized milk products, enhanced surveillance of livestock is necessary to ensure infected cattle are monitored and treated and that impacted milk products are pulled from the food supply. Key strategies include:

- Surveillance for possible asymptomatic infection in livestock and genomic surveillance to understand transmission patterns and track possible mutations.
- Rapid recognition and testing of symptomatic livestock and people.
- Surveillance testing of dairy and meat products.
- Wastewater sampling at livestock facilities, where possible.
- Routine surveillance and testing of agricultural and livestock workers, including at-risk but asymptomatic persons, to detect, contain and treat new human cases and learn more about the route of transmission.
- Public communication on the signs and symptoms that should prompt medical attention and testing.
- Timely surveillance data to help facilitate planning for a potential broader outbreak or pandemic.

Medical Countermeasures and Personal Protective Equipment

People who work with livestock, including poultry and cattle, need access to the most up-to-date information and supplies to protect their health. Key strategies include:

- Pre-position assets from the Strategic National Stockpile in states that are most likely to see cases of HPAI.
- Review recommendations for stockpiling and use of personal protective equipment against HPAI for people who work with livestock, and provide updates to workers and employers.
- Determine the pathway for candidate vaccines for H5N1.
- Provide recommendations about development and prioritization of production of seasonal flu vaccine compared to development of an H5N1 vaccine and prioritization of H5N1 vaccine for populations most at risk.

Communication Strategies

Ensuring impacted communities have necessary public health information and can make informed decisions is imperative to a strong national response. Communications strategies need to be tailored to populations most likely to be impacted by HPAI, using trusted messengers in the languages most commonly spoken by workers. Key strategies include:

- Offer online and in-person training on use of personal protective equipment and education on the public health implications of HPAI.
- Provide information about recommended infection prevention and control practices to clinicians, developed in collaboration with public health professionals and clinicians on the front lines. Recommendations and communications should be updated as new information emerges.
 - It may also be useful to utilize the expertise of ID clinicians in the training and educational demonstrations provided to workers, in conjunction with veterinarians and livestock inspectors, to express the need for workplace safety practices in response to HPAI.
- Communicate up-to-date mitigation strategies to livestock producers and provide resources for implementation to help contain the outbreak with minimal impact on daily operations.

International Coordination

An emphasis on global collaboration and coordination is important, especially in relation to data sharing, global surveillance and international food and livestock safety. Key strategies include:

- The federal government should continue to work closely with international partners, such as the World Health Organization and the World Organization for Animal Health, to develop strategies for HPAI data sharing and comprehensive global surveillance in the livestock sector.
- Global surveillance efforts should prioritize genomic surveillance and tracking changes in the H5N1 viral genome that may make it more fit for spillover into human populations.

Research

Because HPAI has not previously widely spread into cattle, there is a need for research on the virus and approaches to containing it. Key strategies include:

- Bulk testing of milk is necessary in states with confirmed HPAI cases in cattle and at any farms receiving cattle from states with confirmed cases.
- Research is needed to confirm the mode of spread of HPAI from cattle to cattle.

- Research is needed on the potential viral transmission risk to humans from contact with cattle byproducts or materials that could be infectious such as feces, respiratory secretions or products of conception.
- There is limited research on whether HPAI can be transmitted through raw milk products; however, public health authorities highlight the health risks of human consumption of raw milk. The federal government and other research efforts should examine the impact of pasteurization on virus particles present in milk.

Infectious Diseases Workforce

HPAI is the most recent in a series of outbreaks that clearly demonstrate the need for a strong public health infrastructure, including the ID workforce. Nearly 80% of U.S. counties lack an ID physician. Just over half of ID physician training programs and less than 50% of pediatric ID training programs filled in 2023, compared to most other physician specialties, which filled nearly all their programs. Shortages in ID personnel are particularly acute in rural areas where agricultural workers are at greatest risk of contracting HPAI. In addition, research has shown that 80,000 more public health professionals – an increase of nearly 80% – are needed to provide a minimum package of public health services across the U.S.

These shortages need to be addressed to ensure that capacity is available to manage HPAI and future outbreaks. Financial barriers, namely high medical student debt and low reimbursement compared to other specialties, are a chief impediment to ID recruitment. **To address these challenges, we urge Congress and the Administration to prioritize funding for the Bio-Preparedness Workforce Pilot Program at the Health Resources and Services Administration and to improve ID physician reimbursement by including new codes or add-on codes to better capture unique ID physician services in the Medicare Physician Fee Schedule and through legislation to provide an ID incentive payment.**

Questions?

Additional information can be found at idsociety.org/public-health/influenza/avian-influenza-h5n1/ or email IDSA Public Policy Manager Sara Hoopchuk at Shoopchuk@idsociety.org.