AAV Position Statement
H5N1 Highly Pathogenic Avian Influenza

Updated 5/1/22
Further modifications will be posted on the AAV website.

1. The Eurasian H5 strain of H5N1 Highly Pathogenic Avian Influenza Virus (HPAI) has been identified in the US. Avian veterinarians should be on alert for cases that they see that could be this virus; they should immediately report any suspicious morbidity or mortality to their state vet and the United States Department of Agriculture (www.USDA.gov).
2. The USDA Animal and Plant Health Inspection Service (APHIS), working in conjunction with states, has outlined a program for rapid response to HPAI detection. Utilizing APHIS's wild bird surveillance program, an early warning system is in place in case of introduction and distribution of avian influenza viruses that are of concern in the US. This allows for a rapid response to threats to reduce the risk of spread to the poultry industry and to populations of concern.
3. HPAI will not enter the US in legally imported exotic birds. Since 1972 all birds (poultry and exotic birds) imported into the US undergo mandatory quarantine by the US Department of Agriculture, and during this time each shipment has routinely been tested for the HPAI virus during quarantine. During that 30-year period, with the entry of many millions of exotic birds, the Pathogenic Avian Influenza virus has been found ONLY ONCE—in Pekin Robins from China—and it was not H5N1. HPAI is an extremely rare disease in exotic or companion and aviary birds.
4. There have been no recorded cases of bird owners in the US contracting Highly Pathogenic Avian Influenza from companion or aviary birds. The risk of indoor or protected companion birds contracting the disease appears to be minimal, and protective measures are well-described in the literature. People who are interested in purchasing companion and aviary birds in the US should know that no cases of transmission to humans from these birds has been recorded as of April 2022.
5. Because avian influenza has appeared in the US, isolating and securing companion and aviary birds from wild birds and poultry will help to protect pet birds from exposure to the avian influenza virus. The same biosecurity measures that are in place for poultry can be followed for companion and aviary birds. Reducing visitor contact with birds, hand washing, changing clothes, wearing different shoes or foot covers around birds, and cleaning equipment used for birds can be utilized. Additionally, birds that are housed outdoors can have barriers around their enclosures to reduce contact with wild birds. Nylon netting or 10- or 12-gauge wire mesh with 1-inch openings will exclude most birds from entering an enclosed site.
6. Pathogenic Avian Influenza is a disease that can infect poultry, wild birds, and has even been found in companion avian species. Effective control focuses on monitoring the disease by state and federal agencies along with veterinarians diligently reporting disease suspects. Stringent global monitoring programs and immediate culling and correct disposal of infected poultry flocks are essential to limit the continued spread of the disease. Every effort must be made to limit the spread of the virus. Poultry commerce is a global industry, with tens of thousands of chickens legally transported daily from one continent to another. Although it is highly unlikely that day-old chicks would have avian influenza, shipping cartons, feed, feces, transportation vehicles, or contaminated clothing are all potential sources of viral spread. Illegal shipments of poultry, poultry products, or waste can help spread avian influenza.
7. Avian flu exists in many strains, and mild forms of avian influenza are endemic to wild waterfowl such as mallards, but nearly all other varieties of birds have a low incidence of HPAI infection. The presence of avian influenza in wild waterfowl does not mean that the birds are diseased or that they

can spread a virulent form of the virus to poultry or people. Wild birds that commonly harbor these viruses have developed resistance over many millennia; they rarely suffer illness from avian flu viruses. The most current strain of the virus in the US is associated with migrating birds from Europe where there is an outbreak of the Eurasian strain of HPAI. It was initially in wild ducks in South Carolina and North Carolina. By April 2022, HPAI had spread along the eastern seaboard in wild birds and along the Atlantic and Mississippi migration flyways in commercial and backyard poultry.

8. The World Health Organization has reported 863 laboratory-confirmed human cases of infection with H5N1 avian influenza in 18 countries from January 2003 to February 2022. Of these, 455 (53%) have been fatal. To date, one human case of H5 influenza has been documented in the US during this current outbreak.
9. The case fatality rate may be skewed by the fact that poor people in rural areas who are most likely to be infected are not likely to seek medical care unless their illness is grave. The socioeconomic impact of avian influenza on the poorest human populations cannot be overstated. Poultry products are a main source of protein nutrition for a vast majority of the world's population. Poor populations suffer when villages and contracted growers' chickens are culled and fear of contaminated produce stops them from eating poultry products.
10. Vaccination against avian influenza is being used in some countries to slow the spread of HPAI; however, it is not the preferred strategy for stopping the spread of this disease. If a vaccinated bird is exposed to HPAI it could develop a mild asymptomatic disease and could shed sufficient virus to infect other birds. Vaccination may also interfere with detection of the virus by regional or national health officials. Vaccination programs are costly, both in terms of vaccine price and manpower, and may miss many village chickens. Vaccinations must be repeated every 20 weeks for longer living birds.
11. Influenza viruses do not persist in the environment outside of a host for long periods of time. The avian influenza virus is extremely susceptible to dehydration, ultraviolet light, and high temperatures. At 70°F, in dry conditions, the avian influenza will die within minutes. Under ideal conditions at room temperatures, human flu viruses can remain infective for about one week. Exposure to sunlight drastically reduces the length of time flu viruses can remain infective. At cold temperatures, in feces, the virus can survive for weeks. If frozen they can remain viable indefinitely. If poultry is cooked to 160°F all HPAI is inactivated.
12. Avian flu viruses rarely, if ever, jump straight to becoming easily transmissible human flu viruses. Typically, avian influenza must undergo a series of mutations or a major genetic change to acquire the ability of human-to-human transmission. Major genetic changes may occur when an animal or human is infected with two different strains of influenza. Simultaneous infections of human and bird flu in a pig may be required for the viruses to interchange their genetic information and become both highly infectious to humans and highly pathogenic. This is the potential that public health officials fear; however, these large changes in genetic makeup are just as likely to result in genetic changes that make the virus nonpathogenic.
13. Worldwide, there are many strains of avian influenza that cause varying degrees of illness in poultry. Each year there is a flu season for birds just as there is for humans, and, as with people, some forms of the flu are worse than others. This current HPAI outbreak is the fourth incidence within the US. The 2004 outbreak was quickly confined to one flock and eradicated. An outbreak of HPAI H7N7 affected the Netherlands, resulting in several hundred human cases of conjunctivitis, the death of one veterinarian, and the culling of thirty million chickens. The 2015 HPAI outbreak was caused by H5N2 and affected 49 million domestic birds and was the most costly animal health emergency in the history of the US department of agriculture. With the current outbreak on going, the costs are still undetermined.

14. As long as the H5N1 virus does not gain the ability to transmit from human to human, its impact on human health will continue to be minimal. However, it is important to eliminate the virus from the avian population to protect both birds and people. Culling of uninfected avian populations will not assist in the control of avian influenza. When HPAI is detected in poultry in the US, bird owners, breeders, veterinarians, and zoological parks should practice the most stringent biosecurity measures to prevent the spread from poultry to other captive avian species. An additional risk is the potential for local avian depopulation due to potential exposure if eradication programs are initiated in the surrounding locality. When HPAI is detected in the US in wild migratory birds, it is recommended that all captive birds remain housed indoors. For birds housed outdoors, every measure should be taken to prevent or reduce exposure to wild migratory birds, especially waterfowl.
15. Culling wild populations of migrating birds is not an effective method of controlling the spread of wildlife diseases. Culling birds may facilitate dispersal of wild birds to new areas; it is difficult to determine which wild bird species are vectors of disease rather than victims, and these actions could endanger species.
16. If pathogenic human-to-human transmitted avian influenza does enter the US, its most likely source will be by entry of infected humans, not by infected birds.
17. Media reports about bird flu have created a state of fear that can be detrimental to birds and the relationship of people to birds. A rational response is necessary to avoid further deterioration of public perception. Although media reports have highlighted the serious nature of bird flu, there are many important scientific questions about this disease still unanswered. The USDA APHIS website provides real-time updates about avian influenza, including current outbreaks and species affected. As part of the first responder team, avian veterinarians are working with public health professionals and conservationists to provide a rational response to the threat of avian influenza.

The Association of Avian Veterinarians (AAV) is a professional veterinary organization that strives to advance and promote avian medicine, stewardship, and conservation. The AAV has more than 1500 members comprised of veterinarians, veterinary technicians, veterinary students, and allied professionals that work in private practice, colleges and universities, zoos, government, and industry. Many of the AAV's members are considered global leaders in avian conservation and wild bird health. Among the key objectives for the organization, the AAV strives to preserve and protect birds in the wild and their native habitats.

If you have any questions, please do not hesitate to contact our Executive Director,
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