



AAV Position Statement Asian H5N1 Highly Pathogenic Avian Influenza

**Updated 5/9/06*

Further modifications will be posted on the AAV website.

1. The Asian H5N1 Highly Pathogenic Avian Influenza virus (HPAI) has yet not been found in the United States. Avian veterinarians should remain on alert and immediately report any suspicious avian morbidity or mortality to 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 in the event that HPAI is detected within the US. APHIS is working closely with poultry producers regarding disease surveillance and disease containment. The USDA has placed temporary bans on the import of birds from any country in which HPAI has been reported. The poultry industry and the USDA are acting vigilantly to protect US poultry populations and keep our poultry free of HPAI. APHIS is monitoring wild populations of migratory birds in Alaska for the presence of HPAI.
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. (See attached letter from Dennis Senne, virologist, National Veterinary Services Lab.)
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 May 2006.
5. If avian influenza appears 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.
6. Pathogenic Avian Influenza is a disease of domestic poultry, not all birds. Effective control must focus on the poultry industry in affected countries. 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 from infected poultry to wild waterfowl. Poultry commerce is a global industry, with tens of thousands of chickens legally transported daily from one continent to another. Although it is highly that unlikely 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.



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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. Avian migrations are typically North to South, not from Asia or Europe to the Americas, although weather conditions and food sources could alter some routes in a more westerly direction. In addition, the virus could leapfrog from one species to another more easterly migrating species. Insignificant migrations, mostly of shorebirds, occur from Russia across the Bering Strait into Alaska, but these birds are highly unlikely to come into contact with poultry housed outdoors. Were the avian influenza virus to enter the western hemisphere from migratory birds, wild birds in Alaska would be the first to become infected. US government teams are actively engaged in surveillance of waterfowl in Alaska (Statements of American Bird Conservancy, Bird Life International).
8. The World Health Organization has reported 152 laboratory-confirmed human cases of infection with H5N1 avian influenza in Asia, Turkey, and Iraq since 2003. Of these, 83 have been fatal (www.who.org, 1-30-06).
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 human population of Asia exceeds 3.5 billion. (See attached story from the New York Times.) 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. In Asia it is common for millions of people to live in close contact with poultry, with the birds often entering their homes. If a bird becomes ill the family will often slaughter it, clean it, and cook it, potentially exposing themselves to the virus. Direct heavy exposure to an infected bird's body fluids is usually necessary for transmission to people. Millions of domestic birds in Asia and Turkey have become infected and have been destroyed to control the spread of the virus. 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 PHAI is inactivated.



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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 (National Geographic Magazine, October 2005, "Killer Flu.")
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. HPAI has been detected three times in the US: in 1924, 1983, and 2004. The 2004 outbreak was quickly confined to one flock and eradicated (USDA News Release No 0459.05, 10-26-05). 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.
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. If 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. If HPAI is detected in the US in wild migratory birds, all captive birds should 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 (Birdlife International, position statement on avian influenza, www.birdlife.org).
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. The 2003 SARS outbreak in Canada was caused by an infected international traveler; other cases occurred in exposed health care workers. This outbreak was brought under control by a diligent public health response and monitoring of travelers for signs of illness (e.g., fever).
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 AAV provides links for 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.



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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, Dr. Robert Groskin at rgroskin@aav.org.