

## Avian Influenza Announcement

The following warning came from WAZA Executive Director to Regional Associations in North America, Europe, Asia, and Affiliate members in the veterinary field, 29 August 2005. He wrote and requested views of the regional and national associations and selected veterinary organisations. The following is his letter, some of the replies he got and some recent news from Asia on the same subject.

### WAZA Executive Director's letter :

Dear colleagues: Given the current high profile of the possible spread of bird flu from SE Asia to Europe via migratory birds (publicised as potentially fatal if transmitted to humans), a Council Member suggested that we should consider the implications for zoos, provide guidance as required and have a policy statement and PR response ready. The Netherlands Government has, for example, already issued a dictum requiring poultry farmers to keep their birds indoors and other countries including the UK are debating such action. If poultry needs to be (or is required to be) kept indoors then there are considerable implications for zoos in all of the regions across the migratory flight path which keep birds in open paddocks or with netted but open aviaries. May I please have your views on this? Best regards, Peter Dollinger

### How can we protect human, livestock and wildlife health from Avian influenza ?

There are new reports of highly pathogenic avian influenza (H5N1) from Central Asia, including Russia and Kazakhstan. Although not confirmed, an avian influenza outbreak in Mongolia may also be H5N1. In official reports to the World Organization for Animal Health, both Russia and Kazakhstan have indicated that the virus was introduced by migratory birds; however, this has not been demonstrated scientifically. Almost all the human infections with H5N1 avian influenza in Southeast Asia resulted from contact with domestic poultry and/or domestic waterfowl. Wild birds have not been implicated in any human infection.

### Why is this a conservation issue ?

Avian influenza presents a threat to wild bird conservation on several fronts. First, although most strains of avian influenza are relatively benign, H5N1 appears to be able to cause illness and death in many species of wild birds. Second, some public and animal health officials will blame wild birds for spreading H5N1, and there may be calls for culling of wild birds to try to control or limit its spread.

### Why can't culling wild birds control Avian influenza ?

Culling can be effective in controlling domestic animal diseases but there are no examples where culling of native wildlife has completely eradicated a wildlife disease. There are several key reasons why culling of wild birds will not work for controlling avian influenza:

1) Culling birds might lead to increased spread of the virus, as culling activities such as shooting or capture attempts would immediately disperse many birds and the disease to other areas. Disturbing or modifying bird nesting or roosting areas will produce similar results.

2) Species that die from the virus are unlikely to carry the virus long distances, so the reservoir is likely a species that is showing few or no clinical signs rather than the ones that are observed to be sick and dying. Without knowing which species are the reservoir, you cannot even begin to design a culling program.

3) Control of a wildlife disease through culling is likely only to be successful for diseases with low transmission rates that occur in one species, and where the outbreak is contained to a small area. None of these conditions are

met with H5N1: a) avian influenza is highly infectious, b) multiple species are being infected, and c) the disease is spread across much of Central and Southeast Asia. For a scientific paper that discusses management of wildlife diseases, please go to this website: [http://www.oie.int/eng/publicat/rt/2101/a\\_r21110.htm](http://www.oie.int/eng/publicat/rt/2101/a_r21110.htm)

### What can governments do to protect human, livestock and wildlife health.

There are several strategies to prevent transmission of avian influenza among livestock, wildlife and humans:

#### **Improve Surveillance:-**

Increased surveillance is critical to controlling avian influenza. Surveillance at domestic poultry and waterfowl production facilities is necessary to determine the spread of the virus, enact control measures, and protect human, livestock and wildlife health. Improved surveillance requires broad commitment, transparency, efficient reporting mechanisms, and extensive outreach to local poultry holders to provide education and incentives to report problems. Wildlife management authorities also need to be included in any surveillance systems.

#### **Improve Biosecurity:-**

The key to mitigating the effects of avian influenza on wild birds, domestic birds, and ultimately humans, is improved biosecurity. Specifically, contact between wild birds and domestic birds, as well as domestic birds and humans, must be minimized. The highly pathogenic avian influenza (H5N1) virus isolated in the outbreak at Qinghai Nature Preserve (China) - where over 5000 wild birds died - was most closely related to virus isolates from domestic birds in Southern China from 2004. Therefore, the Qinghai outbreak most likely represented a "spill-over" event from domestic birds to wild birds. The best way to prevent future "spillover" events from domestic to wild birds, and "spill-back" events from wild to domestic birds, is to prevent contact between these two groups. Furthermore, husbandry of domestic birds should be designed so that wild and domestic birds and do not share water and feed sources.

#### **Stop the Wildlife Trade:-**

The legal and illegal trade in wildlife may have played a role in the emergence of highly pathogenic avian influenza. Benign avian influenza viruses commonly circulate in wild

bird populations without causing disease. However, in wildlife and poultry markets, highly pathogenic strains of virus can evolve due to the high densities and high turnover of susceptible birds. Furthermore, as many species from disparate places, along with their numerous pathogenic and non-pathogenic viruses, are brought together in the wildlife trade, it provides increased opportunity for disease transmission among species. The movement of wildlife in the trade, often very long distances, can allow viruses to spread geographically. For example, recently smuggled Thai hawk-eagles that were intercepted at an airport in Belgium turned out to be infected with H5N1. Although a different virus, SARS also emerged from the Asian wildlife trade. Consequently, the trade in wildlife forms a clear and present danger to human, livestock and human health. For more information on the wildlife trade and global health, see: <http://www.cdc.gov/ncidod/EID/vol11no07/05-0194.htm>

#### **What can an individual do to avoid exposure to H5N1?**

In areas where H5N1 is suspected or reported to be present (map of the current distribution of H5N1 is here: [http://www.wpro.who.int/avian%5Fflu/images/asia\\_spawn.htm](http://www.wpro.who.int/avian%5Fflu/images/asia_spawn.htm)), humans may come into contact with birds infected with H5N1 by working in domestic poultry and waterfowl production, hunting wild birds, or by contacting found sick or dead birds. The following precautions should be followed to prevent exposure to avian influenza:

- 1) Do not handle birds that appear sick or are found dead,
- 2) Wear disposable gloves, glasses or face shield, and a mask when handling live or dead birds,
- 3) Do not eat, drink, or smoke while handling live or dead birds,
- 4) Wash hands with soap and water, and disinfect any surface that has come in contact with dead birds using alcohol, diluted bleach, or commercial disinfectants,
- 5) Thoroughly cook any bird intended for consumption (i.e. above 160°F or 70°C),
- 6) Dispose of remains of birds after field dressing in a way that will prevent mammalian and avian scavengers from contacting the carcass or remains.
- 7) In areas where H5N1 has been suspected or reported to be present, if flu-like symptoms develop within 10 days of handling live or dead birds, contact a physician and report that exposure to H5N1 may have occurred. For more information on reducing opportunities for transmission of this virus among people, their animals, and wildlife please see the following website: [www.fieldvet.org](http://www.fieldvet.org) or write to [fieldvet@wcs.org](mailto:fieldvet@wcs.org), [http://www.cdc.gov/travel/other/avian\\_flu\\_ig\\_americans\\_abroad\\_032405.htm](http://www.cdc.gov/travel/other/avian_flu_ig_americans_abroad_032405.htm)

#### **Avian flu suspected in Jakarta zoo workers**

Three workers from Jakarta's Ragunan Zoo have been hospitalized with suspected H5N1 avian influenza, increasing the number of suspected human cases in Indonesia to as many as seven, according to news services. The zoo was closed yesterday after 19 captive birds tested positive for the H5N1 virus. The ailing zoo workers include a 28-year-old guide and a 39-year-old vendor, the Associated Press (AP) reported in a statement attributed to Nyoman Kandun, Indonesia's director general of communicable disease control. A Reuters report today said a third person from the zoo, also a food worker, was hospitalized late last night. The latest cases apparently bring the number of suspected case-patients in Indonesia to seven. But Reuters quoted Indonesian Health Minister Siti Fadilah Supari as saying only six people have been hospitalized. On Sep 16, officials confirmed that [http://www.cidrap.umn.edu/cidrap/content/influenza/avianflu/news/sep20\\_05avflu.html](http://www.cidrap.umn.edu/cidrap/content/influenza/avianflu/news/sep20_05avflu.html)

#### **Avian flu shuts down zoo**

The main zoo in Indonesia's capital was shut down after 19 of its birds died of the avian influenza that has killed four people in the sprawling country, doctors and government officials said on Sunday. Three patients, meanwhile, were being treated as suspected bird flu cases at the Sulianti Saroso infectious disease hospital, said Dr. Santoso Suroso, who was awaiting lab tests to confirm whether or not they had the illness. The H5N1 strain of bird flu virus has swept through poultry populations in large swathes of Asia since 2003, resulting in the deaths of tens of millions of birds - and 63 people, including a 37-year-old woman who died last week [http://www.news24.com/News24/World/News/0,,2-10-1462\\_1772607,00.html](http://www.news24.com/News24/World/News/0,,2-10-1462_1772607,00.html)

#### **Jakarta zoo visitors urged to look out for avian flu symptoms**

Indonesian health officials are conducting avian flu blood tests on all workers at a popular Jakarta zoo. Rare eagles, peacocks and other birds at Ragunan Zoo have been found to be infected by the deadly H5N1 virus. The Indonesian government has also urged tourists and locals who visited the zoo recently to check for avian flu symptoms. The bird flu outbreak looks serious as 19 of the 27 samples taken from various birds in the zoo have tested positive. <http://www.channelnewsasia.com/stories/southeastasia/view/169087/1.html>

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### **Engagement of Research Personnel for 'Monitoring tigers, co-predators, prey and their habitat' through WALK-IN-INTERVIEW**

The Wildlife Institute of India (WII) wishes to engage **forty (40) research personnel** on contractual basis for the project 'Monitoring tigers, co-predators, prey and their habitat'. The assignment will be for a period of 7 months initially and may be extended by another 3 months according to project requirements and satisfactory performance of the candidate. The Walk-in-Interview will be conducted at WII on **29th & 30th October, 2005**. Details of the project with essential and desirable qualifications, terms & conditions, and how to apply can be downloaded from the Institute's website <http://www.wii.gov.in/>.

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