

Common facts on bird flu

What is avian influenza or bird flu?

Avian influenza or "bird flu" is a contagious disease of animals caused by viruses that normally infect only birds and less commonly, pigs. Avian influenza viruses are highly species-specific, but have, on rare occasions, crossed the species barrier to infect humans.

In domestic poultry, infection with avian influenza viruses causes two main forms of disease, distinguished by low and high extremes of virulence. The so-called "low pathogenic" form commonly causes only mild symptoms (ruffled feathers, a drop in egg production) and may easily go undetected. The highly pathogenic form spreads very rapidly through poultry flocks, causes disease affecting multiple internal organs and has a mortality that can approach 100%, often within 48 hours.

Which viruses cause highly pathogenic disease?

Influenza A viruses have 16 H subtypes and 9 N subtypes. Only viruses of the H5 and H7 subtypes are known to cause the highly pathogenic form of the disease. However, not all viruses of the H5 and H7 subtypes are highly pathogenic and not all will cause severe disease in poultry.

What are the implications for human health?

The widespread persistence of H5N1 in poultry populations poses two main risks for human health.

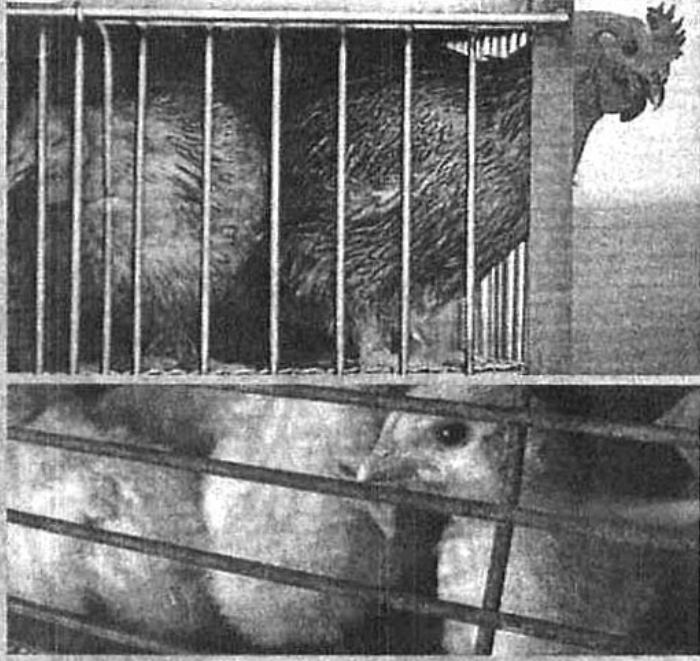
The first is the risk of direct infection when the virus passes from poultry to humans, resulting in very severe disease. Of the few avian influenza viruses that have crossed the species barrier to infect humans, H5N1 has caused the largest number of cases of severe disease and death in humans. Unlike normal seasonal influenza, where infection causes only mild respiratory symptoms in most people, the disease caused by H5N1 follows an unusually aggressive clinical course, with rapid deterioration and high fatality. Primary viral pneumonia and multi-organ failure are common.

A second risk, of even greater concern, is that the virus – if given enough opportunities – will change into a form that is highly infectious for humans and spreads easily from person to person.

How do people become infected?

Direct contact with infected poultry, or surfaces and objects contaminated by their faeces, is presently considered the main route of human infection.

To date, most human cases have



where backyard flocks are common.

occurred in rural or periurban areas where many households keep small poultry flocks, which often roam freely, sometimes entering homes or sharing outdoor areas where children play. As infected birds shed large quantities of virus in their faeces, opportunities for exposure to infected droppings or to environments contaminated by the virus are abundant under such conditions.

Exposure is considered most likely during slaughter, defeathering, butchering, and preparation of poultry for cooking.

Is it safe to eat poultry and poultry products?

Yes, though certain precautions should be followed in countries currently experiencing outbreaks. In areas free of the disease, poultry and poultry products can be prepared and consumed as usual (following good hygienic practices and proper cooking), with no fear of acquiring infection with the H5N1 virus.

Does the virus spread easily from birds to humans?

No. Though more than 100 human cases have occurred in the current outbreak, this is a small number compared with the huge number of birds affected and the numerous associated opportunities for human exposure, especially in areas

The H5N1 virus is sensitive to heat. Normal temperatures used for cooking (70°C in all parts of the food) will kill the virus. Consumers need to be sure that all parts of the poultry are fully cooked (no "pink" parts) and that eggs, too, are properly cooked (no "runny" yolks). When handling raw poultry or raw poultry products, persons involved in food preparation should wash their hands thoroughly and clean and disinfect surfaces in contact with the poultry products – soap and hot water are sufficient for this purpose.

Are there any other causes for concern?

Yes. Several. Domestic ducks can now excrete large quantities of highly pathogenic virus without showing signs of illness, and are now acting as a "silent" reservoir of the virus, perpetuating transmission to other birds. This adds yet another layer of complexity to control efforts and removes the warning signal for humans to avoid risky behaviours.

When compared with H5N1 viruses from 1997 and early 2004, H5N1 viruses now circulating are more lethal to experimentally infected mice and to ferrets (a mammalian model) and survive longer in the environment.

H5N1 appears to have expanded its host range, infecting and killing mammalian species previously considered resistant to infection with avian influenza viruses.

What are the most important warning signals that a pandemic is about to start?

The most important warning signal comes when clusters of patients with clinical symptoms of influenza, closely related in time and place, are detected, as this suggests human-to-human transmission is taking place. For similar reasons, the detection of cases in health

workers caring for H5N1 patients would suggest human-to-human transmission. Detection of such events should be followed by immediate field investigation of every possible case to confirm the diagnosis, identify the source, and determine whether human-to-human transmission is occurring.

Studies of viruses, conducted by specialised WHO reference laboratories, can corroborate field investigations by spotting genetic and other changes in the virus indicative of an improved ability to infect humans. This is why WHO repeatedly asks affected countries to share viruses with the international research community.

What drugs are available for treatment?

Two drugs (in the neuraminidase inhibitors class), oseltamivir (commercially known as Tamiflu) and zanamivir (commercially known as Relenza) can reduce the severity and duration of illness caused by seasonal influenza.

The efficacy of the neuraminidase inhibitors depends, among others, on their early administration (within 48 hours after symptom onset). For cases of human infection with H5N1, the drugs may improve prospects of survival, if administered early, but clinical data are limited. The H5N1 virus is expected to be susceptible to the neuraminidase inhibitors. Antiviral resistance to neuraminidase inhibitors has been clinically negligible so far but is likely to be detected during widespread use during a pandemic.

An older class of antiviral drugs, the M2 inhibitors amantadine and rimantadine, could potentially be used against pandemic influenza, but resistance to these drugs can develop rapidly and this could significantly limit their effectiveness against pandemic influenza. Some currently circulating H5N1 strains are fully resistant to these M2 inhibitors. However, should a new virus emerge through reassortment, the M2 inhibitors might be effective.

So far, most fatal pneumonia seen in cases of H5N1 infection has resulted from the effects of the virus, and cannot be treated with antibiotics. Nonetheless, since influenza is often complicated by secondary bacterial infection of the lungs, antibiotics could be life-saving in the case of late-onset pneumonia. WHO regards it as prudent for countries to ensure adequate supplies of antibiotics in advance.

Source: WHO

How to manage diaper rash

STAR HEALTH DESK

Diaper rash is a very common infection that can cause a baby's skin to become sore, red, scaly, and tender. In most cases, the rash occurs because the skin is irritated by diapers that are too tight; soiled diapers that are left on for too long; or certain brands of detergent, diapers, and baby wipes.

Diaper rash usually can be cleared up by checking a baby's diaper often and changing it as soon as it gets wet or soiled and by using a zinc oxide cream or ointment to soothe the skin and protect it from moisture.

When a diaper rash lasts for more than 3 days, even with changes to the diapering routine, it is usually caused by candida, a yeast-like fungus. This form of the rash is usually red, slightly raised, and has small red dots extending beyond the main part of the rash. It typically starts in the creases of skin and can spread to skin on the front and back of the baby. It usually goes away after treatment



with anti-fungal creams.

Preventing diaper rash

The best way to prevent diaper rash is by keeping your baby's skin as dry and clean as possible and changing diapers often so that feces and urine will not irritate the skin. The plastic that prevents diapers from leaking also prevents air circulation, thus creating a warm, moist environment

where rashes and fungi can thrive. To prevent diaper rash, it is important to:

- change your baby's soiled or wet diapers as soon as possible
- occasionally soak your baby's bottom between diaper changes with warm water
- allow your baby's skin to dry completely before you put on another diaper

If you use cloth diapers, rinse them several times after washing to remove any traces of soap or detergent that can irritate your baby's skin. Avoid using fabric softeners – even these can irritate the skin.

Some experts suggest allowing your baby to go without diapers for several hours each day to give irritated skin a chance to dry and "breathe." This is easiest if you place your baby in a crib with waterproof sheets.

Treating diaper rash

Diaper rash usually goes away within 2 to 3 days with home care. If it persists, or if sores start to appear on your baby's skin, talk to a child specialist.

Dietary vitamin C may prevent oral pre-cancer

Vitamin C from dietary sources, but not from supplements, is associated with a reduced risk of oral pre-malignant lesions in men, a new study indicates.

Dr Nancy Nairi Maserjian, of New England Research Institutes, Watertown, Massachusetts, and colleagues examined intake of vitamins C, E, A and carotenoids in 42,340 men enrolled in the Health Professionals Follow-up Study and the occurrence of oral pre-malignant lesions. The men provided information on supplement use and diet every 2 to 4 years.

The risk of developing such a lesion was not significantly linked to total intake of vitamin C, vitamin A, or carotenoids. However, dietary vitamin C was significantly associated with a reduced risk of oral



pre-malignant lesions: those with the highest intake had a 50 percent reduction in risk compared to those with the lowest intake.

The researchers found no clear relationship with beta-carotene, lycopene, or lutein/zeaxanthin. A

trend for increased risk of oral pre-malignant lesions was observed with vitamin E, especially among current smokers and with vitamin E supplements. Beta-carotene also increased the risk among current smokers.

"It is possible that the protection that seems to be offered by dietary intake of vitamin C is actually partly due to some other component of vitamin C-rich food," Maserjian said.

"Although we do not yet know exactly what component – or interaction between components – is most important, a diet that includes vitamin C-rich foods as well as a variety of nutrients is likely to benefit most people," she said.

Source: International Journal of Cancer

Chronic headache raises depression risk in women

Chronic headaches, particularly migraines and those that are disabling, in conjunction with severe somatic symptoms – physical symptoms of a psychological origin rather than a physical source – greatly increase the risk of major depressive disorder in women, according to a report in the medical journal Neurology.

"The literature on chronic headaches and depression is fairly robust. A number of studies have shown that headache patients are predisposed to depression," lead author Dr Gretchen E Tietjen, from the University of Toledo-Health Sci-

ence Campus in Ohio, told.

The results suggest that chronic headache, disabling headache, and severe somatic symptoms work synergistically to increase the risk of depression.

Alone, the presence of chronic headache had little effect on the risk of depression compared with the effect of the combination of mild episodic headaches and minimal somatic symptoms. When the headaches become more disabling and the somatic symptoms more severe, however, the risk of depression increased markedly.

Very disabling, chronic head-

aches increase the odds of depression by 3.6-fold, and by 4.1-fold if the headaches are migraines, the report indicates. If severe somatic symptoms are also present, then the odds ratios climb to 25.1 and 31.8 for all headaches and for migraines, respectively.

"People with chronic headaches tend to have a lot of...somatic complaints," such as irritable bowel, pelvic pain and fibromyalgia, Tietjen noted. The study results indicate that the coexistence of these conditions dramatically increases the risk of depression, she added.

Source: Neurology

Health Events

Central Hospital gets ISO Certificate



Recently Central Hospital Ltd. in Dhaka has got the ISO 9001:2000 certificate. The Chairman of the hospital, National Professor Dr M R Khan received the certificate from Mr Jerard Denoven of Orion Registrar.

During hand over the certificate Jerard Denoven told, "We have observed the hospital for six months and we give this accreditation after fulfilling our specific criteria."

Professor M R Khan said, "ISO certification is a reassurance to the patients that their treatment plan is as per internationally standard and WHO accepted standard protocols."

"The ISO certification will also enable us to showcase the work being done here to challenge the frontiers of medicine. The hospital is now looking forward to meeting the demands in every specialty in the field of healthcare so that we can prevent patients from going abroad for healthcare" Dr Khan also noted.

Dr M A Quasem, Director of the hospital said, "We never compromise with the quality of healthcare. This achievement will inspire us and has given greater responsibility for maintaining quality as well."

Ibn Sina serves with latest MRI machine



Ibn Sina Diagnostic and Imaging center has introduced the most developed MRI machine.

A scientific seminar was held at the Bangladesh China Friendship Convention Center on this occasion. The keynote speaker of the seminar was Prof Dr Mathias Goyen, MD of Radiology Department of Hamburg University, Germany.

The new branch of Ibn Sina Diagnostic and Imaging Center at Dhanmondi has the latest MRI

machine. Prof Dr Goyen explained the audience about the clinical application and development of Siemens 1.5 Tesla Magnetom Abanto MRI machine.

He said that the multi coil system allows scanning of the entire body within 5 minutes including preparation time 10 minutes. Motion correction system in this machine corrects any movement by patients. Thus anesthesia and repeated exposures for accuracy are not required.

Call for action against steroid abuse among sex workers

"Six years back I was sold to a brothel. The caretaker (Sardarni) forced me to take a drug and I had nothing to do. First, I rejected, but she beat me up and threatened to stop my meal. She reminded me about my financial obligation to her. Initially it increased my health and beauty, but now, I just can not leave it. If I do, I become sick. How could I give up this?" Pinky (not a real name) broke into tears saying this in a seminar organised by ActionAid Bangladesh.

The seminar was arranged to disseminate a study of ActionAid in collaboration with Ulka Narisangha (an organisation working for the sex worker). The study was conducted in two brothels in Madaripur and Daulatdia in 2005 on hazardous drug practice among sex workers.

The study revealed that the practice has been appeared with a complex visage. The phenomenon of age, hierarchy, interest of power and business, insecurity of life and occupation all these rounded in shaping the pattern of harmful drug practice as well as influencing factors.

All the speakers of the Seminar urged to take necessary action against Oradexon (a steroid drug)



abuse among sex workers. Oradexon has a number of adverse effects and should be taken with proper indication. People who take this drug can not stop it suddenly. Withdrawal of this drug needs a gradual process. Most of them do not know it and take Oradexon to increase their beauty and to maintain physical fitness either willingly or compellingly.

The core outcomes of the study include:

- The practice is prevalent in the age group of 15-35 mainly
- The bonded sex workers are brutally victim of the harmful drug
- Along with other drug practices, the use of Oradexon is more dreadful which covers almost 90 percent of the total sex workers community
- Use of Oradexon is slowly poisoning the lives of them
- There is almost no knowledge regarding the proper use of Oradexon and the dreadful consequences
- Earning more money, being in good health and looking aged (in case of underage sex workers) are the three main reasons of taking the drug
- There is open business, hidden forces and cheaper cost that lead the Oradexon to be easily available in the brothel
- Sardarni (women caretaker of the brothel) plays an important role in taking Oradexon
- Financial insecurity also plays an important role behind the practice

Speakers stressed upon the awareness building among sex workers.

West Clinic opens Bangladesh Liaison Center

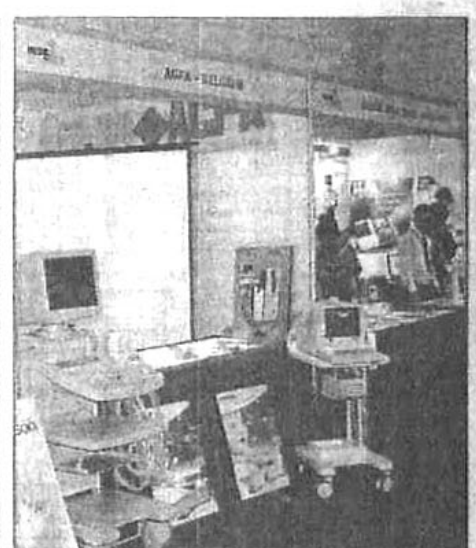
West Clinic Excellence Cancer Center, a renowned cancer center in Singapore has opened their new liaison office at Gulshan in the capital, says a press release.

Eminent cancer specialist Dr Steven Tucker announced the launching of the office at a local hotel in the city. Speaking on that occasion, he said, "The centre will offer great opportunities for Bangladeshi cancer patients to consult with the center in Singapore for various purpose."

He also informed that they will set up a follow up cancer center in Dhaka by next year for the convenience of the local patients. The centre will facilitate them for their follow up and further advices. Telemedicine facilities are expected to be delivered in this center also.

Head of the liaison center, Mr Tareque Osman Farruk was also present on that occasion.

MEDEXPO : SHOWCASING HEALTHCARE SERVICES



The fourth International Medical Exposition (MedExpo) kicked off in the capital on March 22 with a call for improving the quality of healthcare services. Foreign and local hospitals are showcasing their healthcare facilities, exclusive offers and extending the facilities of referral centers in Bangladesh to make easier seeking their treatment options. During the occasion, doctors from foreign hospitals are providing consultations. Cutting-edge medical technology providers are offering the latest products to local healthcare providers, which can help us to build quality medicare services.

STAR HEALTH PHOTO