

Update on Avian and Seasonal Influenza

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Human Infections with Avian Influenza A (H5N1) Virus

During the period 20 May to 15 Sep 2007, a total of 21 human cases of avian influenza A (H5N1) infection were reported to WHO from four countries (China, Egypt, Indonesia, and Vietnam). The case fatality rate was 67 percent.

Latest results for GlaxoSmithKline's H5N1 Vaccine

The final results of GlaxoSmithKline's H5N1 influenza vaccine trials which were reported in *The Lancet* this summer, showed that the adjuvanted vaccine showed significant antigen dose-sparing, high levels of immunogenicity and induction of cross-clade immunity against A/H5N1 viruses. Adjuvants could substantially boost the supply of pre-pandemic H5N1 vaccines by reducing the amount of antigen needed in each dose.

The main side effects were fatigue, headache and pain at the injection site and were more common in the adjuvant group.

New Statistical Tool Confirms Possible Human to Human Spread of Avian Influenza

International investigators from the WHO, with the use of a new statistical tool called TransStat, managed to confirm that avian influenza spread from human to human in a particular family in Indonesia last year.

This real time technology would enable countries to quickly discover whether human to human transmission of the virus is occurring during new avian influenza outbreaks, enabling public health authorities to move fast to contain its spread

Placental transmission of Avian Virus

Studies done in the Infectious Disease Centre in Beijing, China have shown that the H5N1 bird influenza virus can pass through

a pregnant woman's placenta to infect the fetus. Evidence showed that the virus not only affects the lungs, but also affects the gastrointestinal tract, brain, liver and blood cells.

Their findings support the theory of a 'cytokine storm' where the immune system overreacts to the virus in some cases, and sends out an overwhelming swarm of signalling chemicals that end up killing the patient.

Influenza activity worldwide this summer

During the period 20 May to 15 Sep 2007, influenza A (H1 and H3), and influenza B viruses cocirculated worldwide. Influenza A (H3) viruses predominated in Asia, however, influenza A (H1) and B viruses were also reported in this continent.

Seasonal Influenza

Prevention of influenza

Vaccination is the best method for preventing influenza and its potentially severe complications. The influenza vaccine can be administered to any person aged >6 months who wants to reduce the likelihood of becoming ill with influenza or transmitting the virus to others. Annual influenza vaccination is recommended for persons at increased risk for influenza-related complications and severe disease (eg, pregnant women after the first trimester, infants/children aged 6-59 months, persons aged 5-49 years with certain chronic medical conditions and persons aged >50 years) and their household contacts.

In addition, all children aged 6 months to <9 years who have never received influenza vaccination should receive 2 doses of influenza vaccine 4 weeks apart. [\[3\]](#)