Guidelines for the use of seasonal influenza vaccine in humans at risk of H5N1 infection

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WHO is recommending the targeted administration of seasonal influenza vaccine to selected groups at increased risk of exposure to the H5N1 avian influenza virus currently circulating in Asia. Targeted vaccination with the current seasonal influenza vaccine for humans is being recommended, in countries currently experiencing outbreaks of highly pathogenic H5N1 avian influenza in poultry, as one of several measures for reducing opportunities for the simultaneous infection of humans with avian and human influenza viruses. Reduced opportunities for dual infections reduce opportunities for reassortment and for the eventual emergence of a novel influenza virus with pandemic potential.

Selected groups to be immunized

1. All persons who are expected to be in contact with poultry or poultry farms suspected or known to be affected with avian influenza (H5N1), especially (a) cullers involved in destruction of poultry, and (b) people living and working on poultry farms where H5N1 has been reported or is suspected or where culling takes place.
2. Health care workers involved in the daily care of known or confirmed human cases of influenza H5N1.
3. Given sufficient supplies of vaccine, health care workers in emergency care facilities in areas where there is confirmed occurrence of influenza H5N1 in birds.

Considerations

- The pandemic viruses of 1957 and 1968 were reassortants of human and avian subtypes of influenza A.
- Genetic reassortment of human and avian influenza viruses could occur in humans co-infected with current human H1 or H3 subtypes of influenza A and an avian influenza virus acquired from poultry.
- Vaccination with current inter-pandemic vaccine will not protect humans from infection with avian H5N1 influenza – rather, it minimizes the risk of co-infection and genetic reassortment of human and avian influenza viruses in humans.
- Protective levels of antibodies are usually detectable within two weeks of vaccination with an inter-pandemic influenza vaccine. Irrespective of the delay in development of antibodies, people may benefit from vaccination, even if they are exposed during this two week period.
- Epidemic human influenza occurs all year around in tropical and subtropical areas.

Mass vaccination of all inhabitants of affected areas is not supported by current epidemiological data.

At present, there are no specific influenza vaccination requirements for international travellers with respect to the current outbreaks of avian influenza in poultry. The recommendations for international travel and health (including the prevention of influenza infections) are available in the WHO publication, International Travel and Health.