

Scientific Committee on Emerging and Zoonotic Diseases

Consensus Summary on Avian Influenza A (H7N9)

(Updated on 26 March 2014)

The emergence of human infections with avian influenza A(H7N9) virus in Mainland China since March 2013 is of concern. Two distinct waves of human infections have been observed. The first wave occurred from February to May 2013 involving a total of 133 human cases. Subsequently, a few cases were reported during the summer months. The second wave occurred from October 2013 onwards and there have been a decreasing number of cases since early March 2014. As of 25 March 2014, a total of 390 laboratory-confirmed human cases of avian influenza A(H7N9) infection have been reported in 15 provinces/municipalities in Mainland China. In addition, ten cases who were visitors from or travellers to Mainland China have been reported in neighbouring places. Seven of the ten cases were identified in Hong Kong. Most patients suffered from severe respiratory illness and over 30% of them died. Further sporadic human infections and expansion of geographic spread in the Mainland and other countries/areas is anticipated.

2. The current epidemic strain of avian influenza A(H7N9) virus is a novel reassortant avian influenza virus which does not cause illness in birds, but has gained some ability to cross the species barrier, thus causing sporadic poultry-to-human transmission and resulting in severe disease in infected people. Genetic and epidemiological findings showed that patients are likely to be infected through exposure to infected live poultry or contaminated environments, including markets where live poultry are sold. However, the exact source and mode of spread still require further investigation.



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- 3. Family clusters of infection suggest that limited human-to-human transmission may have occurred in close contacts but exposure to a common source could also be one of the explanations. There is no evidence of sustained human-to-human transmission at present.
- 4. Most confirmed H7N9 cases were of older age or had certain underlying medical conditions. The risk factors and the exact spectrum of illness of H7N9 infection require further studies.
- 5. The main concern is whether the virus will further adapt to enable efficient human-to-human transmission, which may result in a pandemic.
- 6. Further importation of human cases of avian influenza A(H7N9) infection to Hong Kong is expected due to heavy traffic between the Mainland and Hong Kong. The risk of importation of affected poultry continues to exist.
- 7. The enhanced preventive and control measures for human infection with avian influenza should be continued. Surveillance for human avian influenza A(H7N9)infection is crucial. Although the risk of human-to-human transmission appears to be low at the present moment, the actual risk is currently unknown and control measures, including appropriate infection control precautions, isolation of suspected and confirmed cases, and quarantine of close contacts of confirmed cases, should be enforced.
- 8. Avian influenza A(H7N9) virus is expected to be sensitive to the neuraminidase inhibitors (i.e. oseltamivir and zanamivir) but resistant to M2 inhibitors (i.e. amantadine and rimantadine). Confirmed cases, highly suspected cases or high risk contacts should receive antiviral treatment with a neuraminidase inhibitor as early as possible.
- 9. The following recommendations were made by the Committee:
- Continue intensive surveillance for avian influenza A(H7N9) virus infection in both human and poultry/birds;
- Maintain a high level of alertness, preparedness and response for avian influenza A(H7N9) virus infection;
- Strengthen publicity and public education on the prevention of the disease;
- Maintain close liaison with international and the Mainland health authorities and local academics to monitor the latest development;
- Carry out further studies to fill the knowledge gaps; and
- Monitor the progress of development of H7N9 vaccine closely.





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