



Epidemiological Update:

Human infection caused by avian influenza A(H7N9) in China

17 April 2013

The Pan American Health Organization / World Health Organization (PAHO/WHO) recommends that Member States should be prepared and maintain the capacity to detect any unusual health event, including those that might be associated with a new subtype of influenza virus. Member States are encouraged to update and implement the relevant components of multi-hazard plans for preparedness and response to public health events.

The Organization does neither advise health screening at points of entry in relation to this event, nor that any travel or trade restrictions be applied.

As of April 17th of 2013, the health authorities of China have notified the WHO of 82 confirmed cases of human infection caused by avian influenza A(H7N9) virus, including 17 deaths. The cases are from the provinces of Anhui (3), Henan (2), Jiangsu (20), Zhejiang (25), and the municipalities of Beijing (1) and Shanghai (31). Further information is available for 63 of the cases and their age range is 4 to 87 (median = 64); with 19 female cases and 45 male cases. The onset of their symptoms occurred from 19 February to 11 April 2013. Updated information is available on the [WHO Disease Outbreak News](#) (DON).

The source of infection and the mode of transmission are currently unknown. At this time there is no evidence of ongoing human-to-human transmission.¹ Preliminary test results provided by the WHO Collaborating Centre in China suggest that the virus is susceptible to the neuraminidase inhibitors (oseltamivir and zanamivir).

The spectrum of clinical illness must be determined. It is possible that these severely-ill patients represent the tip of the iceberg and that there are many more as-yet-undetected mild and asymptomatic infections. It should be noted that the surveillance systems might be preferentially capturing severe cases.

The virus has been found in poultry (ducks, chickens) and pigeons in markets in Anhui, Jiangsu, Shanghai and Zhejiang. Other potential reservoirs of the virus are still under investigation.

The health authorities of China continue investigating the event to identify the source of the outbreak and continue strengthening disease surveillance for early detection, diagnosis and treatment.

¹ WHO Disease Outbreak News, *Human infection with influenza A(H7N9) in China—update*, 10 April 2013. Available at: http://www.who.int/csr/don/2013_04_10/en/index.html

Recommendations

Epidemiological and laboratory surveillance

PAHO/WHO recommends Members States to be prepared and maintain the capacity to detect any unusual health event, including those that may be associated with a new subtype of influenza, including the influenza A(H7N9) virus.

As per previous PAHO/WHO recommendations in these types of events, the initiation of an investigation is recommended in the following situations:

- a severe acute respiratory infection (SARI) case of unknown etiology is detected in a health facility,
- the detection of a SARI cluster with unexplained etiology, or
- an unusual or unexpected SARI case of unknown etiology in the community or in a health care worker.

In such situations, samples of clinical and epidemiological significance should be taken and analyzed within the capacity of the national laboratory system. **All specimens that cannot be subtyped for influenza A and those with inconclusive or unexpected subtyping results should be forwarded, immediately,** to the WHO Collaborating Center for influenza, at the United States Centers for Disease Control and Prevention for additional testing.²

The investigation should include complete epidemiological and clinical information, for example: clinical signs and symptoms, date of onset of symptoms, underlying clinical conditions, history of influenza vaccination, history of treatment with oseltamivir or zanamivir, contact with animals, and history of travel, among others.

The Real-time RT-PCR Protocol for the Detection of A(H7N9) Influenza Virus, was published by WHO on 8 April 2012 on the Global Influenza Programme website.³

Surveillance in animals

As animal surveillance for influenza viruses can provide an early warning system for identifying viruses with the potential for causing human disease, it is important to maintain close and systematic interactions between human health and animal health sectors, for timely exchange of information and to conduct joint risk assessments and prevent and control zoonotic diseases, as necessary.

Surveillance in animals should be intensified and take into consideration not only high pathogenic influenza viruses (HPIV) but also LPAI viruses as the risk to human health is independent of the level of pathogenicity in chickens. Also, influenza surveillance in avian species must include surveillance of wild and domestic animals.

² WHO Collaborating Centre for the Surveillance, Epidemiology and Control of Influenza Centers for Disease Control and Prevention National Center for Immunization and Other Respiratory Diseases Influenza Division. 1600 Clifton Road, A-20. Atlanta, Georgia 30333, United States of America, Fax: +1 404 639 2334, <http://www.cdc.gov/flu/>

³ Available at: http://www.who.int/influenza/gisrs_laboratory/cnic_realtime_rt_pcr_protocol_a_h7n9.pdf

Response

PAHO/WHO encourages Member States to update and implement the relevant components of their multi-hazard plans for preparedness and response to public health events.

International travel and trade

PAHO/WHO does not advise the implementation of health screening at points of entry in relation to this event, nor that any travel or trade restrictions be applied.

PAHO/WHO takes this opportunity to remind Member States that the determination of health measures that can be adopted in response to specific public health risks pursuant paragraph 1 of Article 43 of the International Health Regulations (IHR),⁴ should be based on scientific principles, available scientific evidence, and available guidance and advice by WHO. According to paragraph 3 of Article 43, any measure adopted pursuant paragraph 1 and significantly interfering with international traffic should be notified to PAHO/WHO. In compliance with Recommendation 3 by the IHR Review Committee,⁵ endorsed by Member States through Resolution WHA64.1,⁶ PAHO/WHO is actively monitoring health measures adopted by States Parties and, when justified by the assessment of the public-health rationale of such measures, the Organization will be sharing relevant information with other States Parties.

Information for the Public

Although there is no evidence about the ongoing human-to-human transmission¹ of this virus, always it is pertinent to observe transmission prevention measures for respiratory viruses, in particular the following:

- Washing hands is the most effective way of reducing transmission.
- Dissemination of “respiratory etiquette” knowledge to help prevent transmission of the virus.
- Individuals with fever should avoid leaving their homes to go to work or to other public places.

⁴ Available at: http://whqlibdoc.who.int/publications/2008/9789241580410_eng.pdf

⁵ Available at: http://apps.who.int/gb/ebwha/pdf_files/WHA64/A64_10-en.pdf

⁶ Available at: http://apps.who.int/gb/ebwha/pdf_files/WHA64-REC1/A64_REC1-en.pdf#page=21

The transmission prevention measures should be disseminated in multiple languages to reach all population groups.

For more information, consult the following links:

- [Frequently asked questions on human infection with influenza A\(H7N9\) in China](#)
- [Influenza](#)
- [Influenza at the Human-Animal interface \(HAI\)](#)
- [Avian influenza fact sheet](#)
- [Weekly Epidemiological Record \(WER\) 29 March 2013](#)

References

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