Risk assessment of avian influenza A(H7N9) – third update

Background

From April 2013 – 26 January 2015, WHO had confirmed 486 cases and 185 deaths from avian influenza A(H7N9). The vast majority of cases have occurred in mainland China, with cases also reported from Hong Kong (12), Taiwan (4), Malaysia (1) and Canada (2).

On 8 February, WHO confirmed an additional 83 cases of avian influenza A(H7N9) from various provinces across mainland China, with onset dates between 20 December 2014 and 27 January 2015. When compared to recent months, this is a marked increase in the number of cases reported each week.

The peak of the avian influenza season in Chinese bird flocks tends to occur in January/February each year. This coincides with several weeks of celebrations related to the Chinese Lunar New Year and associated increases in travel to and from China, mass gatherings, and greater interactions between people and poultry. In 2014, there was a spike of human cases of influenza A(H7N9) during this period.

The current peak is 21 cases, reported between the 5-11 January. This is lower than during the 2014 peak, when 35-45 cases per week were being reported throughout January. However, the Chinese Lunar New Year falls later in 2015 (19 February) and it is therefore possible that cases may continue to increase due to the heightened interaction between humans and poultry during this period.

This increase in cases fits with the seasonally expected pattern, and does not significantly alter the risk assessment for the UK; however this increase and the recent cases imported to Canada highlights the continued risk of sporadic imported cases with a history of travel to China, particularly given the increased travel to and from China for the Lunar New Year.
Avian influenza A(H7N9) does not appear to transmit easily to humans from poultry or their environments, but it may be more transmissible than A(H5N1) (1). There is currently no evidence of sustained human-to-human transmission and most cases are associated with close contact with poultry. Influenza A(H7N9) has low pathogenicity in birds, and infected flocks do not always show symptoms. It can be difficult to identify when the virus is circulating in birds.

**Risk Assessment**

The risk of influenza A(H7N9) infection to UK residents in the UK is very low.

The risk of influenza A(H7N9) infection to UK residents who are travelling to mainland China is very low.

The level of risk in those who arrive in the UK from affected areas and meet the case definition is very low but warrants testing for influenza A(H7N9).

The probability that a cluster of cases of severe respiratory illness in the UK is due to influenza A(H7N9) is very low, but warrants testing. A history of travel to China would increase the likelihood of influenza A(H7N9).

If compliance with guidance on infection control measures is good, the risk to healthcare workers caring for cases of influenza A(H7N9) in the UK is very low. However, severe respiratory illness in healthcare workers caring for cases of influenza A(H7N9) warrants testing.

The risk to contacts of confirmed cases of influenza A(H7N9) infection is low but warrants follow up in the 10 days following exposure and urgent investigation of any new febrile or respiratory illness.

**Advice for Travellers**

No specific restrictions to travel are advised. However, to help reduce the risk of infection NaTHNaC advise that travellers:

- avoid visiting live bird and animal markets (including ‘wet’ markets) and poultry farms
- avoid contact with surfaces contaminated with animal faeces
- avoid untreated bird feathers and other animal and bird waste
- do not eat or handle undercooked or raw poultry, egg or duck dishes
- do not pick up or touch dead or dying birds
- do not attempt to bring any poultry products back to the UK
- maintain good personal hygiene with regular hand washing with soap and use of alcohol-based hand rubs.

Travellers to China should be alert to the development of signs and symptoms of influenza for 10 days following their return. It is most likely that anyone developing mild symptoms during this time is suffering from seasonal influenza, a cold, or other commonly circulating respiratory infection. However, if they become concerned about the severity of their symptoms, they should seek appropriate medical advice and inform the treating clinician of their travel history. NaTHNaC have produced a factsheet for travellers to China during Chinese New Year.

Advice for clinicians and health professionals

Clinicians should retain a high level of suspicion when considering managing patients with confirmed or suspected influenza A and a history of travel to China in the 10 days before the onset of symptoms.


Contact the local PHE Public Health Laboratory for advice on arranging testing for influenza A due to H5/H7: https://www.gov.uk/government/collections/public-health-laboratories


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<tr>
<th>Case Definition for possible cases of A(H7N9)</th>
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<tr>
<td><strong>Clinical:</strong></td>
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<tr>
<td>a. Fever ≥ 38°C, and clinical or CXR findings of consolidation or ARDS. OR</td>
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<td>b. Other severe illness suggestive of an infectious process.</td>
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<td><strong>AND</strong></td>
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<td><strong>Epidemiological:</strong></td>
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<tr>
<td>a. Patient has visited China in the 10 days before onset of symptoms OR</td>
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<tr>
<td>b. Patient has had close contact with avian influenza A(H7N9) confirmed case in 10 days before the onset of symptoms.</td>
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Further Reading

(1) WHO Risk Assessment A(H7N9) (2 October 2014)

ECDC Risk Assessment: Human Infection with avian influenza A(H7N9) virus – Fourth Update (02 February 2015)

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