



## Guidance Document

### Interim Guidance for Follow-up of Contacts of Persons with Suspected Infection with Highly Pathogenic Avian Influenza A (H5N1) Virus in the United States

November 7, 2008

This guidance provides recommendations for follow-up of contacts of suspected human cases of highly pathogenic avian influenza A (H5N1) virus infection in the United States. The guidance is for public health personnel who are involved in surveillance of contacts of suspected or confirmed cases of H5N1 virus infection in the United States.

Guidance for testing of suspected human cases of highly pathogenic avian influenza A (H5N1) virus infection in the United States is available. See "*Updated Interim Guidance for Laboratory Testing of Persons with Suspected Infection with Highly Pathogenic Avian Influenza A (H5N1) Virus in the United States*" at <http://www.cdc.gov/flu/avian/professional/#guidance>.

To date, there have been no reports of highly pathogenic avian influenza A (H5N1) virus infections among animals or humans in the United States. This guidance is based upon current knowledge regarding human infection with H5N1 virus, and will be updated as the epidemiology of human H5N1 virus infection changes.

#### Follow-up Period:

Public health personnel should attempt to identify all known close contacts of suspected H5N1 cases (see *Updated Interim Guidance for Laboratory Testing of Persons with Suspected Infection with Highly Pathogenic Avian Influenza A (H5N1) Virus in the United States*.)

\*Close contacts are defined as persons who were within about 6 feet of a suspected, probable or confirmed H5N1 case while the case was symptomatic.

Potential close contacts include the following identifiable persons:

- a) household and family contacts
- b) health care personnel
- c) laboratory workers
- d) other persons who were known to be within about 6 feet of the suspected case

Available data suggest that the incubation period for human infection with H5N1 virus is generally  $\leq 7$  days. Therefore, all identified close contacts should be monitored daily for 7 days after the last known exposure to an ill person suspected to be infected with H5N1. The following should be assessed each day during this period:

- a) measured temperature
- b) presence of any illness symptoms

Any close contacts that have a measured temperature of  $\geq 38.0^\circ\text{C}$  or any illness symptoms should be referred for prompt medical evaluation, and possible testing for H5N1. *For guidance on isolation*

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*precautions, see Interim Recommendations for Infection Control in Health-Care Facilities for Patients with Known or Suspected Avian Influenza at <http://www.cdc.gov/flu/avian/professional/infect-control.htm>).*

### **When to Discontinue Follow-up of Close Contacts:**

Monitoring of close contacts of a suspected H5N1 case may be discontinued when laboratory testing by RT-PCR of appropriately collected respiratory specimens from the suspected H5N1 case at a state health department laboratory or at CDC has excluded infection with H5N1 virus, or upon the absence of any illness symptoms among contacts during the 7-day surveillance period described above.

### **Antiviral Chemoprophylaxis for Close Contacts:**

Daily antiviral chemoprophylaxis with a neuraminidase inhibitor medication (oseltamivir or zanamivir) should be provided to close contacts of a suspected or confirmed H5N1 case for 7 days after the last known exposure. Oseltamivir is the recommended antiviral medication for chemoprophylaxis of H5N1; zanamivir is an alternative. Oseltamivir is approved for chemoprophylaxis of influenza in persons aged one year and older; Zanamivir is approved for chemoprophylaxis of influenza in persons aged 5 years and older. Physicians should consult the manufacturer's package insert for dosing, contraindications, and potential adverse effects.

Oseltamivir chemoprophylaxis should be provided to close contacts of a suspected or confirmed H5N1 case in the following order of priority:

1. Highest-risk exposure groups
  - i. Household or close family member contacts of a suspected or confirmed H5N1 case
2. Moderate-risk exposure groups
  - i. Health care personnel in close contact (within about 6 feet) with a suspected or confirmed H5N1 patient; for example: during intubation or performing tracheal suctioning, or delivering nebulized drugs, or handling inadequately screened/sealed body fluids without use of recommended personal protective equipment (PPE), or with a recognized breach in PPE procedures including improper doffing
  - ii. Laboratory workers who had unprotected exposure to H5N1 virus-containing samples
  - iii. Social contacts of a suspected or confirmed H5N1 case
3. Low-risk exposure groups
  - i. Health care personnel not in close contact with a suspected or confirmed H5N1 case or who used appropriate personal protective equipment during exposure to a suspected or confirmed H5N1 case.

### **When to Discontinue Antiviral Chemoprophylaxis of Close Contacts:**

Oseltamivir chemoprophylaxis of close contacts of a suspected H5N1 case may be discontinued when laboratory testing by RT-PCR of appropriately collected respiratory specimens from the suspected H5N1 case at a state health department laboratory or at CDC has excluded infection with H5N1 virus, or absence of any illness symptoms among contacts following the 7-day chemoprophylaxis and monitoring period.

\*Note that close contact has been considered to be within 3 feet or 1 meter by infection control professionals. To define a close contact, this document uses "within about 6 feet of an ill person" to include the potential contribution of small particle droplet nuclei and large droplet transmission.

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### **References:**

Writing Committee of the Second World Health Organization (WHO) Consultation on Clinical Aspects of Human Infection with Avian Influenza A (H5N1) Virus. Update on avian influenza A (H5N1) virus infection in humans. *N Engl J Med* 2008;358:261-73.

WHO Rapid Advice Guidelines on pharmacological management of humans infected with avian influenza A (H5N1) virus May 2006. Available at:  
[http://www.who.int/medicines/publications/WHO\\_PSM\\_PAR\\_2006.6.pdf](http://www.who.int/medicines/publications/WHO_PSM_PAR_2006.6.pdf)

Schünemann HJ, Hill SR, Kakad M, Bellamy R, Uyeki T, Hayden F, Yazdanpanah Y, Beigel J, Chotpitayasunondh T, Del Mar C, Farrar J, Hien TT, Özbay B, Sugaya N, Fukuda K, Shindo N, Stockman L, Vist GE, Croisier A, Nagjdaliyev A, Roth C, Thomson C, Oxman AD, for the WHO Rapid Advice Guideline Panel on Avian Influenza WHO Rapid Advice Guidelines for the pharmacological management of human infection with avian influenza A (H5N1) virus. *Lancet Infectious Diseases* 2007;7:21-31.

WHO guidelines for investigation of human cases of avian influenza A(H5N1) January 2007. Available at:  
[http://www.who.int/csr/resources/publications/influenza/WHO\\_CDS\\_EPR\\_GIP\\_2006\\_4/en/print.html](http://www.who.int/csr/resources/publications/influenza/WHO_CDS_EPR_GIP_2006_4/en/print.html)

World Health Organization. Protection of individuals with high poultry contact in areas affected by avian influenza H5N1: Consolidation of pre-existing guidance February 2008. Available at:  
[http://www.who.int/csr/disease/avian\\_influenza/guidelines/high\\_contact\\_protection/en/print.html](http://www.who.int/csr/disease/avian_influenza/guidelines/high_contact_protection/en/print.html)