



COUNTY OF ORANGE HEALTH CARE AGENCY

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PUBLIC HEALTH EPIDEMIOLOGY & ASSESSMENT

The following information was modified from a CDC Health Advisory dated 4/5/13. For the complete report, see <http://emergency.cdc.gov/HAN/han00344.asp>.

Human Infections with Novel Influenza A (H7N9) Viruses

Summary

As of April 5, 2013, Chinese public health officials have reported 16 cases of human infection with a novel avian influenza A (H7N9) virus from four different provinces (Shanghai, Anhui, Jiangsu, and Zhejiang) in China. All patients were hospitalized with severe respiratory illness, and six persons have died. These are the first human infections identified with an avian influenza A (H7N9) virus infection. Fifteen cases are in adults and one case is in a child. All cases had illness onset from February 19 through March 31, 2013. No person-to-person transmission or epidemiologic link between any of the cases has been identified. The source of infection is still under investigation. Preliminary data suggest that the viruses are likely susceptible to neuraminidase inhibitors (e.g., oseltamivir [Tamiflu] or zanamivir [Relenza]).

At this time, no cases of human infection with avian influenza A (H7N9) viruses have been detected in the United States.

Interim Recommendations for Clinicians

Clinicians should consider the possibility of novel influenza A (H7N9) virus infection in persons with respiratory illness and the following travel or exposure history:

- Recent travel to countries where human cases of novel influenza A (H7N9) virus infection have recently been detected, especially if there was recent direct or close contact with animals (such as wild birds, poultry, or pigs) or where influenza A (H7N9) viruses are known to be circulating in animals. Currently, China is the only country that has recently reported novel influenza A (H7N9) human cases; OR
- Recent contact with confirmed human cases of infection with novel influenza A (H7N9) virus.

Suspect cases should be reported immediately to Orange County Public Health by phone at 714-834-8180. All human cases of novel influenza are reportable by law in California under the California Code of Regulations, Title 17, Section 2500.

Testing

Testing will be facilitated by Orange County Public Health on a case-by-case basis once reported. Specimens will be forwarded to appropriate CDPH and CDC partners for confirmation.

- Clinicians should obtain a nasopharyngeal swab or aspirate from suspect cases, place the swab or aspirate in viral transport medium, and refrigerate the specimen until transport is arranged to the Orange County Public Health Laboratory.
- Clinicians should follow appropriate infection control precautions (see next page) while obtaining specimens.
- Viral culture should NOT be attempted on suspect cases.
- If reverse-transcriptase polymerase chain reaction (RT-PCR) testing has already been conducted, patients with novel influenza A (H7N9) virus infections should have a positive test result for influenza A virus but be unsubtypeable. Laboratories conducting RT-PCR should submit ALL unsubtypeable influenza A specimens to Orange County Public Health for further testing.
- Commercially available rapid influenza diagnostic tests (RIDTs) may not detect avian or variant influenza A viruses in respiratory specimens. Therefore, a negative RIDT does not exclude infection and a positive test result for influenza A does not confirm variant or avian influenza because these tests cannot distinguish between human, avian or variant influenza A viruses. Therefore, respiratory specimens should be collected and sent for RT-PCR testing through Orange County Public Health.

Infection Control

- Healthcare personnel caring for patients under investigation for novel influenza A (H7N9) virus infection should adhere to Standard Precautions plus Droplet, Contact, and Airborne Precautions, including eye protection, until more is known about the transmission characteristics of the A (H7N9) virus, since it has been shown to cause severe respiratory illness in cases identified so far.

Treatment

- For persons hospitalized with suspected influenza, including suspected novel H7N9 virus infection, clinicians should start empiric treatment with influenza antiviral medications (oral oseltamivir, inhaled zanamivir) as soon as possible, without waiting for laboratory confirmation.
- For high-risk persons (persons <5 years of age, ≥65 years of age, and those with certain underlying medical conditions) with suspected influenza of any severity, including suspected novel H7N9 virus infection, clinicians should start empiric treatment with influenza antiviral medications (oral oseltamivir, inhaled zanamivir) as soon as possible, without waiting for laboratory confirmation.
- Antiviral treatment is most effective when started as soon as possible after influenza illness onset. Early initiation of treatment provides a more optimal clinical response, although treatment of moderate, severe, or progressive disease begun after 48 hours of symptoms may still provide benefit.
- Clinical treatment decisions should not be made on the basis of a negative rapid influenza diagnostic test result since the test has only moderate sensitivity.

For More Information

CDC Health Advisory: <http://emergency.cdc.gov/HAN/han00344.asp>.

World Health Organization (WHO) update: http://www.who.int/csr/don/2013_04_05/en/index.html.

CDC avian influenza A (H7N9) information page: <http://www.cdc.gov/flu/avianflu/h7n9-virus.htm>.