VERMONT
DEPARTMENT OF HEALTH

Health Advisory
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Human Illnesses Caused By Novel Influenza A (H7N9) Viruses

To: Healthcare Providers, Hospitals and Ambulatory Care Centers
From: Bradley J. Tompkins, MS, MPH, Infectious Disease Epidemiologist

– **Please Distribute Widely –**

Summary
Public health authorities in China are collaborating with international partners, including those at the U.S. Centers for Disease Control and Prevention (CDC), to better understand the risk posed by a novel strain of avian influenza (H7N9) in humans. This novel strain has caused severe respiratory illness. As of April 15, 60 lab-confirmed cases have been reported in China, including 13 deaths. No cases of novel influenza A (H7N9) have been reported outside of China.

Background
This is the first time that this particular avian influenza subtype, H7N9, has been found in humans. This virus is different from influenza viruses currently circulating in humans, and different from previous H7N9 viruses found in birds. Because this strain is novel, it could have the potential to cause a pandemic if gains the ability to spread easily from person to person. At this time, the World Health Organization (WHO) reports that there is no evidence of sustained human-to-human transmission. Chinese authorities are working to determine the source of these illnesses and uncover additional cases.

No human cases of novel influenza A (H7N9) infection have been reported in the U.S., nor has this virus been detected in birds inside the U.S. As part of their routine preparedness actions, CDC is already working on a candidate vaccine virus in the event that it should be needed.

Requested Actions:

A. Testing

- Clinicians who see patients with influenza-like illness who also meet either of the two exposure criteria listed below should consider diagnostic testing for influenza via a reverse-transcriptase polymerase chain reaction (RT-PCR) test. Report the suspected case to the Health Department's Infectious Disease Epidemiology Unit at 800-640-4374 before making testing arrangements.

    1. Patients who have recently traveled to countries where human cases of novel H7N9 have recently been detected, especially if the patient reports recent close contact with animals, including wild birds and poultry, or if they visited an area where the H7N9 virus is known to circulate in wild animals. China is currently the only country that has reported novel H7N9 human cases.

2. Patients who have had recent contact with confirmed cases of novel influenza A (H7N9).

- Clinicians should obtain a nasopharyngeal or nasal swab or aspirate from these patients, place the specimen in a viral transport medium, and contact the Vermont Department of Health Laboratory at 802-863-7336 to arrange for testing. Initial RT-PCR testing will be performed at the Health Department Laboratory, and all confirmatory testing of novel influenza A (H7N9) will be conducted at CDC.

- Specimens should be collected with appropriate infection control precautions for novel influenza viruses of Standard Precautions plus Droplet, Contact and Airborne Precautions, including eye protection, until more is known about the transmission characteristics of this novel strain.

- Rapid influenza diagnostic tests may not detect novel influenza A viruses in respiratory specimens, therefore a negative rapid test result does not exclude an infection with influenza A.

- Positive rapid tests cannot confirm novel influenza infections because these tests cannot differentiate between the various influenza A subtypes. Therefore, patients with a positive rapid flu test who are suspected of having an infection with novel influenza A should still have a respiratory specimen collected and sent to the Health Department Laboratory for RT-PCR testing.

B. Treatment
- Preliminary data suggests that the H7N9 virus is susceptible to neuraminidase inhibitors. Patients with a suspected novel influenza A (H7N9) infection who are hospitalized or those who are at high risk for complications (less than 5 years of age, 65 years of age or greater, those with certain underlying medical conditions) should begin treatment with influenza antiviral mediations (oral oseltamivir, inhaled zanamivir) as soon as possible without waiting for laboratory confirmation.

C. Reporting
- Clinicians should **immediately** report suspected cases of novel influenza A (H7N9) to the Vermont Department of Health's Infectious Disease Epidemiology Unit at 800-640-4374.

For More Information:

CDC Avian Influenza A (H7N9) information page:
http://www.cdc.gov/flu/avianflu/h7n9-virus.htm

WHO H7N9 Avian Influenza Infections in China page:
http://www.who.int/csr/don/2013_04_01/en/index.html