

Interim Guidance—HIV-Infected Adults and Adolescents: Considerations for Clinicians Regarding Swine-Origin Influenza A (H1N1) Virus

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Background

Human infections with a swine-origin influenza A (H1N1) virus that is transmissible among humans were first identified in April 2009 with cases in the United States and Mexico. The epidemiology and clinical presentations of these infections are currently under investigation. There are insufficient data available at this point to determine who is at higher risk for complications of swine-origin influenza A (H1N1) virus infection. However, adults and adolescents with HIV infection, especially persons with low CD4 cell counts, are known to be at higher risk for viral and bacterial lower respiratory tract infections and for recurrent pneumonias.

Evidence that influenza can be more severe for HIV-infected adults and adolescents comes from studies among HIV-infected persons who had seasonal influenza; these data are limited. However, several studies have reported higher hospitalization rates, prolonged illness and increased mortality, especially among persons with AIDS. Thus, immune compromised persons, including HIV-infected adults and adolescents and especially persons with low CD4 cell counts or AIDS can experience more severe complications of seasonal influenza and it is possible that HIV-infected adults and adolescents are also at higher risk for swine-origin influenza complications.

Clinical Presentation

HIV-infected adults and adolescents with swine-origin influenza would be expected to present with typical acute respiratory illness (e.g., cough, sore throat, rhinorrhea) and fever or feverishness, headache, and muscle aches. For some HIV-infected persons, especially persons with low CD4 cell counts, illness might progress rapidly, and might be complicated by secondary bacterial infections including pneumonia. HIV-infected persons who have suspected swine-origin influenza A (H1N1) virus infection should be tested ([see Guidance on Specimen Collection](#)), and specimens from HIV-infected persons who have unsubtypeable influenza A virus infections should be sent to the state public health laboratory for additional testing to identify swine-origin influenza A (H1N1).

Persons with HIV infection should remain vigilant for the signs and symptoms of influenza, as outlined above. Persons with HIV infection who are concerned that they might be experiencing signs or symptoms of influenza infection, or who are concerned they might have been exposed to a confirmed, probable

or suspected case of influenza infection, either seasonal influenza or swine-origin influenza A (H1N1), should consult their healthcare provider to assess the need for evaluation and for possible anti-influenza treatment or prophylaxis.

Treatment and chemoprophylaxis

The currently circulating swine-origin influenza A (H1N1) virus is sensitive to the neuraminidase inhibitor antiviral medications zanamivir and oseltamivir, but is resistant to the adamantane antiviral medications, amantadine and rimantadine. HIV-infected adults and adolescents who meet current case-definitions for confirmed, probable or suspected swine-origin influenza A (H1N1) infection ([see Guidance on Case Definitions](#)) should receive empiric antiviral treatment. HIV-infected adults and adolescents who are close contacts of persons with probable or confirmed cases of swine-origin influenza A (H1N1) should receive antiviral chemoprophylaxis. Antiviral chemoprophylaxis with either oseltamivir or zanamivir can be considered for HIV-infected persons who are household close contacts of a suspected case.

These [recommendations for treatment and chemoprophylaxis](#) are the same ones used for others who are at higher risk of complications from influenza. As is recommended for other persons who are treated, antiviral treatment with zanamivir or oseltamivir should be initiated as soon as possible after the onset of influenza symptoms, with benefits expected to be greatest if started within 48 hours of onset based on data from studies of seasonal influenza. However, some data from studies on seasonal influenza indicate benefit for hospitalized patients even if treatment is started more than 48 hours after onset. Recommended duration of treatment is five days. Recommended duration of prophylaxis is 10 days after last exposure. Oseltamivir and zanamivir treatment and chemoprophylaxis regimens recommended for HIV-infected persons are the same as those recommended for adults who have seasonal influenza. Clinicians should monitor treated patients closely and consider the need to extend therapy based on the course of illness. [Recommendations](#) for use of influenza antivirals for HIV-infected adults and adolescents might change as additional data on the benefits and risks of antiviral therapy in such persons become available.

No adverse effects have been reported among HIV-infected adults and adolescents who received oseltamivir or zanamivir. There are no known absolute contraindications for co-administration of oseltamivir or zanamivir with currently available antiretroviral medications.

Other ways to reduce risk for HIV-infected adults and adolescents

There is no vaccine available yet to prevent swine-origin influenza A (H1N1).

The risk for swine-origin influenza A (H1N1) might be reduced by taking steps to limit possible exposures to persons with respiratory infections. These actions include frequent handwashing, covering coughs, and having ill persons stay home, except to seek medical care, and minimize contact with others in the household who may be ill with swine-origin influenza virus. Additional measures that can limit transmission of a new influenza strain include voluntary home quarantine of members of households with confirmed or probable swine influenza cases, reduction of unnecessary social contacts, and avoidance whenever possible of crowded settings. If used correctly, facemasks and respirators may help reduce the risk of getting influenza, but they should be used along with other preventive measures, such as avoiding close contact and maintaining good hand hygiene. A respirator that fits snugly on the face can filter out small particles that can be inhaled around the edges of a facemask, but compared with a facemask it is harder to breathe through a respirator for long periods of time. [Interim guidances](#) regarding means to decrease the risk of getting swine-origin influenza virus are available. These [guidances](#) will be updated as more information becomes available, including information on the risk of swine-origin influenza-related complications among HIV-infected adults and adolescents.

Patients should be reminded of the importance of maintaining their health as a means of reducing their risk of infection with influenza and improving their immune system's ability to fight an infection should it occur. In particular, patients who are currently taking antiretrovirals or antimicrobial prophylaxis against opportunistic infections should be reminded of the importance of adhering to their prescribed treatment.