

# Novel H1N1 Flu 12

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## UNDERSTAND the problem

An estimated 36,000 Americans die annually from seasonal influenza and its complications. Sadly, there is an under-used vaccine that can prevent many of the hospitalizations and deaths, lessening the suffering and financial burden of this disease.

In addition to the risks of seasonal influenza, a new viral strain can become a pandemic if there is very little to no immunity in the human population and there is efficient, effective transmission from person to person, as with the 2009–2010 novel H1N1 flu.<sup>1</sup> In the United States, this novel influenza A (H1N1) virus of swine origin was first detected in people in April 2009. Since then, it has become widespread in most states and has risen to a global pandemic.

## WHAT are the signs

The symptoms of swine influenza infection in humans are similar to those seen with typical seasonal influenza and include fever, lethargy, lack of appetite, and cough. Swine influenza tends to have a low (1% to 4%) associated morbidity.<sup>5</sup> However, some patients will develop severe complications, such as exacerbation of underlying chronic medical conditions, pneumonia, respiratory decompensation, and death.

Clinicians should test persons for the novel H1N1 virus if they have an acute febrile respiratory illness or sepsis-like syndrome.<sup>3</sup> Patients who require hospitalization or who are at high risk for severe disease should be tested and treated first.

## Ask Your Patients...

“Do you know about H1N1 flu vaccination?”

## If Your Patient Asks...

“Should I be concerned about swine flu?”

## WHO is at risk

In June 2009, the World Health Organization signaled that a global pandemic of novel influenza A (H1N1) was underway by raising the worldwide pandemic alert to its highest level, Phase 6.<sup>2</sup> Since then, the new H1N1 virus has continued to spread.

Persons at greater risk for complications of seasonal influenza will also be at greater risk for complications associated with H1N1 swine flu. This includes:<sup>3</sup>

- Pregnant women
- Children younger than 5 years of age
- Persons 65 years of age or older
- Adults and children who have chronic disorders (e.g., diabetes, asthma, cardiovascular disease)
- Adults and children who have immunosuppression
- Children and adolescents who are receiving long-term aspirin therapy

Unlike the seasonal flu, the median age for patients hospitalized due to H1N1 swine flu infection is 20 years of age, and the incidence is highest among patients younger than 4 years of age.<sup>4</sup> Only 5% of hospitalized H1N1 patients are 65 years of age or older; with seasonal flu, 60% of hospitalizations are for persons 65 years of age or older. Although they are less likely to be infected with 2009 H1N1, persons older than 65 years of age are at greater risk for serious complications from the illness.

## LEAD by example

The CDC has identified five groups who should be given priority vaccines for novel H1N1 influenza:<sup>4</sup>

- Pregnant women
- Persons who live with or provide care for infants younger than 6 months of age
- Healthcare and emergency medical services personnel
- Children and young adults 6 months to 24 years of age
- Persons 25 to 64 years of age at higher risk for influenza-related complications

These patients should be vaccinated as soon as the vaccine is available.

In addition to recommending H1N1 vaccination, healthcare professionals should be an example to the community and obtain the vaccine as soon as possible. Those who have received the vaccine are generally more aware of the need to inform the patients of the value of the vaccination, and their example is an encouragement.<sup>6</sup>

## WHERE to find resources

### Centers for Disease Control and Prevention

<http://www.cdc.gov/h1n1flu>

### World Health Organization

<http://www.who.int/csr/disease/swineflu/en/index.html>

### National Institute of Allergy and Infectious Diseases

<http://www3.niaid.nih.gov/topics/Flu>

### Association for Professionals in Infection Control and Epidemiology

<http://www.apic.org>

### National Network for Immunization Information

<http://www.immunizationinfo.org>

### State Vaccination Resources

<http://www.cdc.gov/h1n1flu/vaccination/statecontacts.htm>

- 1 Atkinson W, Wolfe S, Hamborsky J, McIntyre L (eds). Influenza. In: *Epidemiology and Prevention of Vaccine-Preventable Diseases*. 11th ed. Washington DC: Public Health Foundation; 2009: 135-156.
- 2 Centers for Disease Control and Prevention. Novel H1N1 Flu: Background on the Situation. 2009. Available at <http://www.cdc.gov/h1n1flu/background.htm>. Last accessed January 21, 2010.
- 3 Centers for Disease Control and Prevention. Interim Guidance for Clinicians on Identifying and Caring for Patients with Swine-origin Influenza A (H1N1) Virus Infection. 2009. Available at <http://www.cdc.gov/h1n1flu/identifyingpatients.htm>. Last accessed October 22, 2009.
- 4 Centers for Disease Control and Prevention. Use of influenza A (H1N1) 2009 monovalent vaccine: recommendations of the Advisory Committee on Immunization Practices, 2009. *MMWR*. 2009;58(RR10):1-8.
- 5 World Health Organization. Swine Influenza: Frequently Asked Questions. Available at [http://www.who.int/csr/disease/swineflu/frequently\\_asked\\_questions/en/index.html](http://www.who.int/csr/disease/swineflu/frequently_asked_questions/en/index.html). Last accessed January 21, 2010.
- 6 Centers for Disease Control and Prevention. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices. *MMWR*. 2005;55(RR08):1-40.

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