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## **H1N1 Influenza and Adults with Cardiovascular Disease\***

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\*This interim guidance has been updated from Spring 2009 to include information regarding vaccination guidelines for 2009 H1N1 influenza and seasonal influenza.

### **Background**

People with cardiovascular disease are at increased risk of having medical complications of influenza. The information in this document is intended to help this group prevent getting seasonal and 2009 H1N1 influenza and provide guidance if they develop influenza-like symptoms.

### **Guidance and Considerations for Health Care Providers and for State and Local Public Health Agencies**

- People with chronic cardiovascular disease and cerebrovascular disease (CVD) are at increased risk of experiencing an acute exacerbation of disease during influenza epidemics.<sup>1-7</sup>
- People with chronic cardiovascular disease are at higher risk for both seasonal and 2009 H1N1 influenza-related complications
- Consideration should be given for having adequate supplies of commonly used cardiovascular medications for preventing and treating cardiovascular events.<sup>8</sup>
- Health care providers should be aware that 2009 H1N1 influenza and seasonal influenza might produce increased numbers of cardiovascular events, leading to increased hospitalizations and use of resources to treat acute coronary events, heart failure, and stroke.<sup>9-11</sup>
- Early empiric use of influenza antiviral medication is recommended for those at increased risk of influenza complications who present with influenza-like symptoms. This includes adults aged 65 years or older and people with cardiovascular disease. See <http://www.cdc.gov/h1n1flu/antiviral.htm> for more information.

### **Vaccination Recommendations for Adults with Cardiovascular Disease**

- Detailed information on 2009 H1N1 vaccination guidelines can be found at <http://www.cdc.gov/h1n1flu/vaccination/acip.htm>

### **Seasonal Influenza Vaccine**

- All patients with cardiovascular disease, including those  $\geq 65$  years, should receive the seasonal (annual) influenza vaccine as soon as it is available. Detailed information on seasonal (annual) influenza immunization guidelines are available at <http://www.cdc.gov/flu/professionals/acip/>

### **2009 H1N1 Monovalent Influenza Vaccine**

- Patients aged 25–64 years with cardiovascular disease are considered a target group for 2009 H1N1 influenza vaccine and should be vaccinated as soon as vaccine is available.
- Patients aged  $\geq 65$  years with or without cardiovascular disease are not considered an initial vaccine target group for 2009 H1N1 influenza, but should be vaccinated as more 2009 H1N1 influenza vaccine becomes available.

- Additional 2009 H1N1 influenza vaccine target groups include pregnant women, household contacts and caregivers for children younger than 6 months of age, healthcare and emergency medical services personnel, and all people from 6 months through 24 years of age.

### For More Information:

- More information about vaccination for influenza A (H1N1) and seasonal influenza is available at—  
<http://www.cdc.gov/h1n1flu/vaccination/> and  
<http://www.cdc.gov/flu/professionals/vaccination/>
- More information about antiviral recommendation is available at—  
<http://www.cdc.gov/h1n1flu/recommendations.htm>
- More information for clinicians about the novel H1N1 influenza is available at—  
<http://www.cdc.gov/h1n1flu/clinicians/>
- More information about CDC's outreach effort to clinicians, Clinician Outreach and Communication Activity (COCA), is available at—  
<http://emergency.cdc.gov/coca/about.asp>

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