

Clinician Advisory:

Interim guidance for use of 23-valent pneumococcal polysaccharide vaccine during novel influenza A (H1N1) outbreak

June 9, 2009

Objective

To provide interim guidance on which groups should be vaccinated with the 23-valent pneumococcal polysaccharide vaccine (PPSV23) to prevent pneumococcal infections during the outbreak of novel influenza A(H1N1).

Background

Influenza predisposes individuals to bacterial community-acquired pneumonia. During the 20th century influenza pandemics, secondary bacterial pneumonia was an important cause of illness and death and *Streptococcus pneumoniae* (pneumococcus) was reported as the most common etiology. Severe pneumococcal pneumonia associated with inter-pandemic influenza also has been reported, and *S. pneumoniae* remains a leading cause of vaccine-preventable illness and death in the United States. The current novel influenza A (H1N1) outbreak is evolving rapidly, and CDC continues to compile key information regarding risk of influenza, severity of illness and attack rate of secondary bacterial pneumonia among influenza patients. At this time, however, the role of pneumococcal infections among severe cases of novel influenza A (H1N1), such as those requiring hospitalization, is unclear.

Pneumococcal vaccines

During influenza outbreaks, pneumococcal vaccines may be useful in preventing secondary pneumococcal infections and reducing illness and death

Currently, two vaccines are available for prevention of pneumococcal disease, a 23-valent pneumococcal polysaccharide vaccine (PPSV23) and a 7-valent pneumococcal conjugate vaccine (PCV7).

Recommendation for use of PPSV23 during influenza A(H1N1) outbreak

CDC's Advisory Committee on Immunization Practices (ACIP) recommends a *single dose of PPSV23 for all people 65 years and older and for persons 2 to 64 years of age with certain high-risk conditions (Please see Table)*. People in these groups are at increased risk of pneumococcal disease as well as serious complications from influenza.

A single revaccination is recommended for people 65 years and older who were first vaccinated before age 65 years as well as for people at highest risk, such as those who have no spleen, and those who have HIV infection, AIDS or malignancy.

All people who have existing indications for PPSV23 should continue to be vaccinated according to current ACIP recommendations during the outbreak of novel influenza A(H1N1).

Emphasis should be placed on vaccinating people aged less than 65 years who have established high-risk conditions because PPSV23 coverage among this group is low and because people in this group appear to be overrepresented among severe cases of novel influenza A (H1N1) infection, based on currently available data.

Use of PPSV23 among people without current indications for vaccination is not recommended at this time. This recommendation may be revised as the epidemiology and clinical presentation of novel influenza A (H1N1) virus infection as well as the frequency and severity of secondary pneumococcal infections are better understood.

Pneumococcal conjugate vaccines

PCV7 is recommended for all children aged less than 5 years; national coverage among 19-35 month olds with 3 or more PCV7 doses is currently > 90% . While maintaining this high coverage is important, expanding the use of PCV7 to people aged ≥ 5 years is not indicated because circulation of the 7 serotypes included in the vaccine has declined substantially and disease caused by these serotypes is now uncommon.

For further information about recommendations for use of pneumococcal vaccines, including contraindications, precautions and adverse effects please see the following:

- [Recommended adult immunization schedule - United States, 2009](#)
- [Pneumococcal polysaccharide vaccine. Vaccine information statement \(VIS\)](#)
- [Centers for Disease Control and Prevention. Prevention of pneumococcal disease. *MMWR Morbidity and Mortality Weekly Report* 1997;46\(RR-8\):1-20.](#)
- [ACIP provisional recommendations for use of pneumococcal vaccines.](#)

Table. U.S. ACIP recommendations for use of pneumococcal polysaccharide vaccine.

Pneumococcal polysaccharide vaccine (PPSV23)	
Universal vaccination	All adults 65 years of age and older
Medical Indications	Persons 2 through 64 years of age who have one or more of the following long-term health problems:
	<ul style="list-style-type: none"> • chronic cardiovascular disease (congestive heart failure and cardiomyopathies) • chronic pulmonary disease including chronic obstructive pulmonary disease and emphysema • diabetes mellitus • alcoholism • chronic liver disease, including cirrhosis • cerebrospinal fluid leaks • functional or anatomic asplenia including sickle cell disease and splenectomy • immunocompromising conditions including HIV infection, leukemia, lymphoma, Hodgkin’s disease, multiple myeloma, generalized malignancy, chronic renal failure, nephrotic syndrome; those receiving immunosuppressive chemotherapy (including corticosteroids); and those who have received an organ or bone marrow transplant
	Adults 19 through 64 years of age who:
	<ul style="list-style-type: none"> • smoke cigarettes • have asthma