

## Commonly-raised issues about pneumococcal vaccination

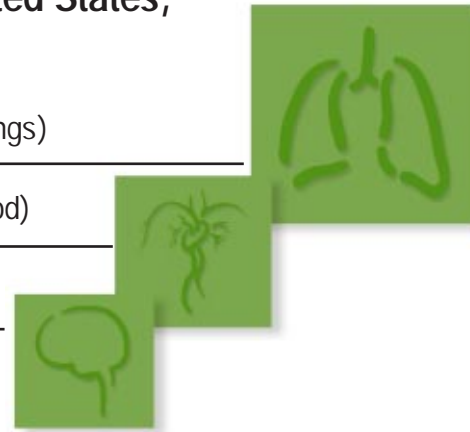
This information is provided to help you communicate with patients about pneumococcal disease and the appropriateness of vaccination



# Explaining pneumococcal disease to your patients

Pneumococcal disease is caused by the bacterium *Streptococcus pneumoniae*, which can infect the lungs, brain, ear, and bloodstream. Annually in the United States, *S. pneumoniae* causes an estimated:<sup>1</sup>

- 500,000 cases of pneumococcal pneumonia (infection in the lungs)
- 50,000 cases of pneumococcal bacteremia (infection in the blood)
- 3,000 cases of pneumococcal meningitis (infection in the brain)



## Pneumococcal disease can be very serious

- Pneumococcal disease causes 40,000 or more deaths every year in the United States<sup>1,2</sup>
  - ▶ More deaths than all other vaccine-preventable diseases combined<sup>1,2</sup>

# *Treatment can be complicated as a result of increased drug resistance*

- In some areas, up to 35% of pneumococcal isolates have shown intermediate- or high-level resistance to penicillin<sup>1</sup>
- Treating patients infected with nonsusceptible organisms may:<sup>1</sup>
  - ▶ Prolong hospitalization
  - ▶ Require the use of expensive alternative antimicrobial agents
  - ▶ Increase medical costs

# Who should be vaccinated against pneumococcal disease?

The Advisory Committee on Immunization Practices (ACIP) recommends pneumococcal vaccination for the following:<sup>1</sup>

■ All individuals  $\geq 65$  years of age

- ▶ PNEUMOVAX<sup>®</sup> 23 (Pneumococcal Vaccine Polyvalent) is contraindicated in individuals who are hypersensitive to any component of the vaccine; please read the [Prescribing Information](#) before administering PNEUMOVAX 23

■ Individuals  $\geq 2$  years of age with underlying medical conditions, including:

- ▶ Chronic cardiovascular disease
- ▶ Diabetes mellitus
- ▶ Chronic liver disease
- ▶ Functional or anatomic asplenia (e.g., sickle cell disease, splenectomy)
- ▶ Chronic pulmonary disease
- ▶ Alcoholism
- ▶ Cerebrospinal fluid leaks
- ▶ Caution and appropriate care should be exercised in administering PNEUMOVAX 23 to individuals with severely compromised cardiovascular and/or pulmonary function in whom a systemic reaction would pose a significant risk
- ▶ Safety and effectiveness in children  $< 2$  years of age have not been established; accordingly, PNEUMOVAX 23 is not recommended in this age group

■ Immunocompromised individuals  $\geq 2$  years of age, including those who have:

- ▶ Generalized malignancy
- ▶ Hodgkin's disease
- ▶ Conditions associated with immunosuppression\*
- ▶ Leukemia
- ▶ Multiple myeloma
- ▶ HIV infection
- ▶ Lymphoma
- ▶ Chronic renal failure
- ▶ Nephrotic syndrome
- ▶ If the vaccine is used in people receiving immunosuppressive therapy, the expected serum antibody response may not be obtained

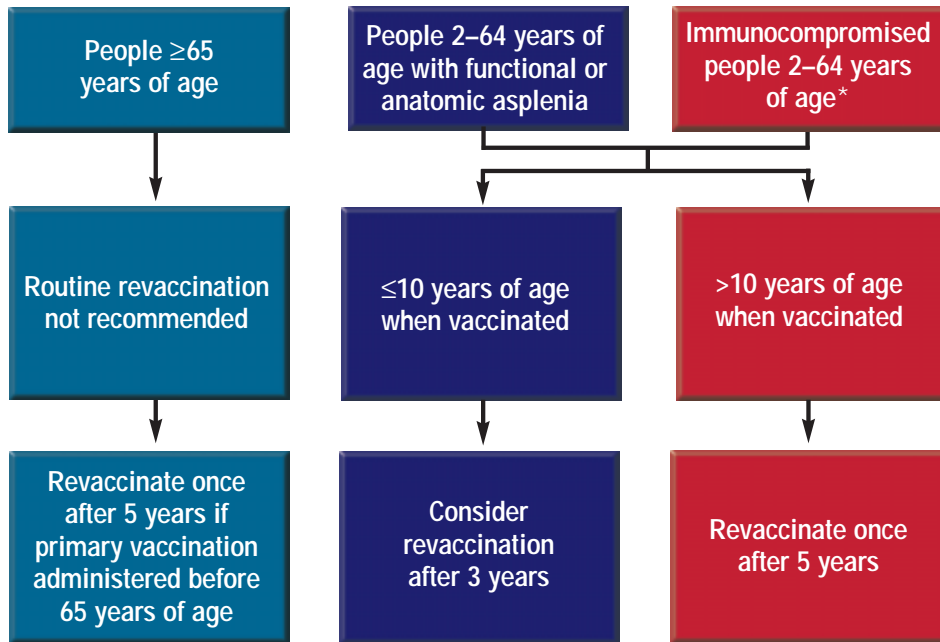
\*Including patients who have undergone organ or bone marrow transplantation, and those receiving immunosuppressive chemotherapy (including long-term systemic corticosteroids)

## *Patients' vaccination records are not available*

- People in the high-risk groups for pneumococcal disease who don't know if they have been vaccinated against the disease should be vaccinated<sup>2</sup>
- Give your patients a record of their vaccination, such as that provided on the vaccination wallet card offered by Merck Vaccine Division
- Routine revaccination of immunocompetent individuals previously vaccinated with 23-valent polysaccharide vaccine is not recommended
- PNEUMOVAX<sup>®</sup> 23 (Pneumococcal Vaccine Polyvalent) is contraindicated in individuals who are hypersensitive to any component of the vaccine
- Caution and appropriate care should be exercised in administering PNEUMOVAX 23 to individuals with severely compromised cardiovascular and/or pulmonary function in whom a systemic reaction would pose a significant risk
- Please read the [Prescribing Information](#) before administering PNEUMOVAX 23

# Who should be revaccinated?

The Advisory Committee on Immunization Practices recommends revaccination for selected people<sup>1</sup>



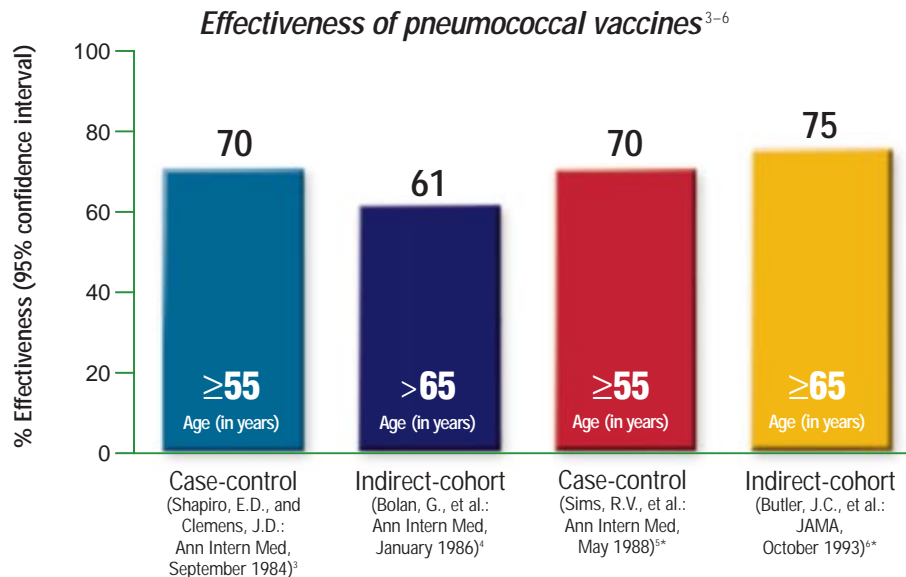
Routine revaccination of immunocompetent individuals previously vaccinated with 23-valent polysaccharide vaccine is not recommended.

Revaccination once is recommended for individuals  $\geq 2$  years of age who are at highest risk of serious pneumococcal infection and those likely to have a rapid decline in pneumococcal antibody levels, provided that at least five years have passed since receipt of a first dose of pneumococcal vaccine.

<sup>1</sup>Includes patients with HIV infection, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, generalized malignancy, chronic renal failure, or nephrotic syndrome; those receiving immunosuppressive chemotherapy (including corticosteroids); and those who have undergone organ or bone marrow transplantation

# Efficacy of pneumococcal vaccination in older patients

Pneumococcal vaccines have demonstrated effectiveness in several studies



\*immunocompetent patients

Adapted from Shapiro and Clemens, 1984;<sup>3</sup> Bolan, et al., 1986;<sup>4</sup> Sims, et al., 1988;<sup>5</sup> and Butler, et al., 1993.<sup>6</sup>

PNEUMOVAX® 23 (Pneumococcal Vaccine Polyvalent) is contraindicated in individuals who are hypersensitive to any component of the vaccine.

PNEUMOVAX 23 will not prevent disease caused by capsular types of pneumococcus other than those contained in the vaccine.

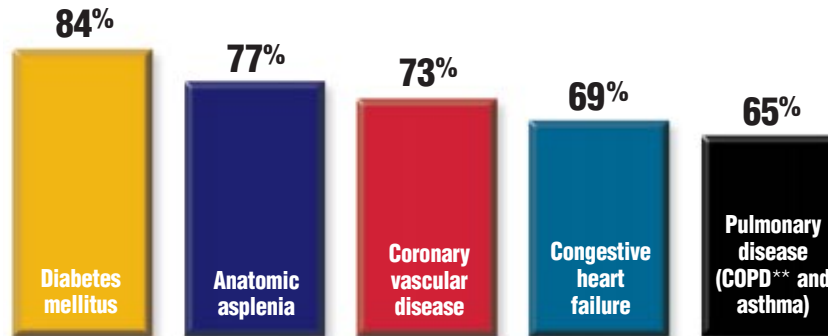
Please read the [Prescribing Information](#) before administering PNEUMOVAX 23.

Effectiveness

# Efficacy of pneumococcal vaccination in patients with underlying medical conditions

Effectiveness of pneumococcal vaccines has been demonstrated in patients who have underlying illnesses

*Estimated pneumococcal vaccine effectiveness in high-risk patients<sup>6\*</sup>*



\*Based on an indirect-cohort study using commercially available 14-valent or 23-valent vaccines in the United States

\*\*COPD=chronic obstructive pulmonary disease

Adapted from Butler, et al., 1993.<sup>6</sup>

Any febrile respiratory illness or other active infection is reason for delaying use of PNEUMOVAX<sup>®</sup> 23 (Pneumococcal Vaccine Polyvalent), except when, in the opinion of the physician, withholding the agent entails even greater risk.

PNEUMOVAX 23 should be given at least two weeks before elective splenectomy, if possible.

Please read the [Prescribing Information](#) before administering PNEUMOVAX 23.

Underlying Medical  
Conditions

## ***Does the vaccine cause pneumonia?***

- People do not get pneumococcal disease or pneumonia from pneumococcal vaccine
  - ▶ Pneumococcal vaccine does not contain live organisms
- Pneumococcal vaccine is generally well tolerated
  - ▶ Local reactions at the injection site (including soreness, warmth, erythema, swelling, and induration) and fever ( $\leq 102^{\circ}\text{F}$ ) were the most common adverse experiences reported in clinical trials; other more serious adverse reactions including those of longer duration have been reported; for a full list of adverse experiences, please see the Adverse Reactions section of the [Prescribing Information](#)

Please read the [Prescribing Information](#) before administering PNEUMOVAX<sup>®</sup> 23 (Pneumococcal Vaccine Polyvalent).

# *Payment for pneumococcal vaccination*

## **For many people, pneumococcal vaccination expenses are covered**

- Medicare Part B covers 100% of the cost of pneumococcal vaccine and its administration<sup>7</sup>
  - ▶ People covered include those  $\geq 65$  years of age and some people  $< 65$  years of age<sup>7</sup>
- People who are not covered by Medicare may be covered by Medicaid for the cost of pneumococcal vaccination<sup>8</sup>
  - ▶ Medicaid programs are different in each state<sup>8</sup>
  - ▶ To be eligible for federal funds, states are required to provide Medicaid coverage for most people who receive federally assisted income maintenance statements<sup>8</sup>

**Many private health insurance companies also cover pneumococcal vaccination.**

Please read the [Prescribing Information](#) before administering PNEUMOVAX<sup>®</sup> 23 (Pneumococcal Vaccine Polyvalent).

**References:**

1. Centers for Disease Control and Prevention: Prevention of pneumococcal disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP), *MMWR 46(RR-8)*:1–24, April 4, 1997. 2. Centers for Disease Control and Prevention: Pneumococcal disease, in *Epidemiology and Prevention of Vaccine-Preventable Diseases* (6th ed.), eds. W. Atkinson, et al., Department of Health & Human Services, Public Health Service, January 2000, pp. 249–263. 3. Shapiro, E.D., and Clemens, J.D.: A controlled evaluation of the protective efficacy of pneumococcal vaccine for patients at high risk of serious pneumococcal infections, *Ann Intern Med 101(3)*:325–330, September 1984. 4. Bolan, G., et al.: Pneumococcal vaccine efficacy in selected populations in the United States, *Ann Intern Med 104(1)*:1–6, January 1986. 5. Sims, R.V., et al.: The clinical effectiveness of pneumococcal vaccine in the elderly, *Ann Intern Med 108(5)*:663–657, May 1988. 6. Butler, J.C., et al.: Pneumococcal polysaccharide vaccine efficacy: An evaluation of current recommendations, *JAMA 270(15)*:1826–1831, October 1993. 7. Health Care Financing Administration: Medicare and you 2000, Publication No. HCFA-10050, January 2000, pp. 1–57. 8. Health Care Financing Administration: Medicaid eligibility, [www.hcfa.gov/medicaid/meligib.htm](http://www.hcfa.gov/medicaid/meligib.htm) [Accessed March 1, 2000].

**PNEUMOVAX<sup>®</sup>23**  
**(Pneumococcal Vaccine Polyvalent)**

**Prevention is the best protection**



Vaccine Division

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