

Pneumococcal (19 Years and Older)

Traveler Summary

Key Points

- | Pneumococcal disease is a bacterial infection occurring worldwide acquired through direct contact with respiratory secretions from infected persons.
- | Risk is increased for infants, young children, the elderly, and persons with underlying medical conditions. In temperate climates, pneumococcal disease is more common in winter and early spring.
- | Symptoms include sudden onset of fever, chills, cough, difficulty or rapid breathing, and chest pain.
- | Consequences of infection include inflammation of brain membranes, respiratory failure, or blood infection.
- | Prevention includes observing good respiratory hygiene measures (cough and sneeze etiquette) and handwashing practices.
- | Two types of pneumococcal vaccine are available, and many persons will need both. Prevnar 13 is routinely given to infants in a 4-dose series and is also given as a single-dose to persons 65 years and older or to immunocompromised individuals of all ages. Pneumovax 23 is given as a single-dose to adults 65 years and older and to immunocompromised individuals who are 2 years or older.
- | Side effects of both vaccines are most commonly injection-site reactions.
- | Duration of vaccine protection from Prevnar 13 is lifelong; no booster is required. Duration of protection from Pneumovax 23 is at least 5 years; 1 or 2 boosters are recommended for certain persons.

Introduction

Pneumococcal disease, a bacterial infection occurring worldwide and transmitted person to person through direct contact with respiratory secretions from infected persons or carriers, is a leading cause of serious illness, especially among unvaccinated children and adults. Travelers are at risk of respiratory illness of all kinds but are generally not at increased risk for serious pneumococcal disease, except for certain persons with immunocompromising conditions and those who are very young or very old.

Risk Areas

Pneumococcal disease occurs worldwide but is more common in developing countries, with the majority of deaths occurring in Africa and Asia. In temperate climates, pneumococcal disease is more prevalent in winter and early spring.

Transmission

Pneumococcal disease is predominantly transmitted person to person via direct contact with respiratory droplets or secretions (e.g., mucus or saliva) from infected persons or from healthy carriers of the bacteria.

Risk Factors

Risk is increased for infants, young children, and the elderly (especially in crowded settings) and for persons with viral upper respiratory infections, underlying medical conditions, and immunocompromising conditions.

On aircraft, risk for infection (although very low) exists for persons sitting within a 2-seat range (in back, front, and beside) of an infectious traveler.

Symptoms

Symptoms most commonly appear 1 to 3 days following exposure and include sudden onset of fever, chills, productive cough (with or without pus- or blood-tinged sputum), and general discomfort. Chest pain, difficulty or rapid breathing, and shortness of breath may also occur. Fever, shortness of breath, or altered mental status may be the initial symptoms in the elderly.

Consequences of Infection

Pneumococcal disease can lead to meningitis (inflammation of the brain membranes causing stiff neck, headache, lack of energy, or seizures), respiratory failure, or blood infection.

Need for Medical Assistance

Persons who develop symptoms of pneumococcal disease should seek medical attention.

Prevention

Nonvaccine

Observe good respiratory hygiene measures (cough and sneeze etiquette) and frequent, thorough handwashing practices. Penicillin can also prevent pneumococcal infection in certain persons.

Vaccine

Two pneumococcal vaccines are available in the U.S., and many persons will need both.

- ▮ Pevnar 13 is given routinely as a childhood vaccination to children aged 2-59 months and is recommended for all persons 5 years and older with certain medical conditions placing them at high risk and for all adults 65 years and older.
- ▮ Pneumovax 23 is given routinely to persons 65 years and older, persons 2 years and older with certain medical conditions placing them at higher risk, cigarette smokers, and residents of nursing homes or other long-term care facilities.

Side Effects

The most common vaccine side effects include fever, pain, swelling, and redness at the injection site. Fever, decreased appetite, irritability, and increased or decreased sleeping may also occur with Pevnar 13.

Persons with underlying medical conditions or those who have concerns about the vaccine should speak to their health care provider before vaccine administration.

Timing

Pevnar 13 is given as follows:

- ▮ Routine, regardless of travel for children 15 months and younger: 4 doses, given at 2, 4, 6, and 12-15 months. If earlier protection is needed for travel, the first 3 doses may be given as little as 4 weeks apart. Different regimens apply if vaccination was started late.
- ▮ Children younger than 18 years with certain medical conditions: 1 or 2 doses
- ▮ Adults 19 years or older who are immunocompromised and all adults 65 years and older: 1 dose
- ▮ Many persons will require both Pevnar 13 and Pneumovax 23; they cannot be administered on the same day. Pevnar 13 should be given first.

Booster doses of Pevnar 23 are not needed.

Pneumovax 23 is given as follows:

- ▮ Routine, regardless of travel for all adults 65 years and older: 1 dose
- ▮ Children who are immunocompromised or have certain medical conditions: 1 dose, usually at 2 years and older
- ▮ Adults 19 years and older with certain medical conditions, who smoke, or who live in long-term care facilities: 1 dose
- ▮ A minimum interval of 8 weeks between a dose of Pneumovax 23 (if indicated) and a previously given dose of Pevnar 13 may be used.

A second dose of Pneumovax 23 is needed in some persons; administration should be 5 years after the first Pneumovax 23 dose.

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