

## **PNEUMOCOCCAL VACCINE**

**CLASS:** Vaccine, Inactivated (Bacterial)

**INDICATIONS:** Immunization of children 6 weeks through 17 years of age against *Streptococcus pneumoniae* infection caused by serotypes included in the vaccine

Immunization of children 6 weeks through 5 years of age against otitis media caused by *Streptococcus pneumoniae* serotypes 4, 6B, 9V, 14, 18C, 19F, and 23F

Immunization of adults  $\geq 50$  years against pneumococcal pneumonia and invasive disease caused by *Streptococcus pneumoniae* serotypes included in the vaccine

The Advisory Committee on Immunization Practices (ACIP) recommends routine vaccination for the following (CDC 59[RR-11], 2010):

All children age 2-59 months

Children 60-71 months with underlying medical conditions including:

Immunocompetent children with chronic heart disease (particularly cyanotic congenital heart disease and heart failure), chronic lung disease (including asthma if treated with high dose corticosteroids), diabetes, cerebrospinal fluid leaks, or cochlear implants

Children with functional or anatomic asplenia, including sickle cell disease or other hemoglobinopathies, congenital or acquired asplenia, or splenic dysfunction.

Children with immunocompromising conditions including congenital immunodeficiency (includes B or T cell deficiency, complement deficiencies and phagocytic disorders; excludes chronic granulomatous disease), HIV infection, chronic renal failure, nephrotic syndrome, leukemia, lymphoma, Hodgkin disease, generalized malignancies, solid organ transplant, or other diseases requiring immunosuppressive drugs (including long term systemic corticosteroids and radiation therapy)

Children who received  $\geq 1$  dose of PCV7

Note: Routine use is not recommended for healthy children  $\geq 5$  years of age.

Children  $\geq 6$  years and Adolescents  $\leq 18$  years of age (CDC, 2013c), and Adults  $\geq 19$  years of age (CDC, 2012): The ACIP also recommends routine vaccination for persons with the following underlying medical conditions:

Immunocompetent persons with cerebrospinal fluid leaks or cochlear implants

Persons with functional or anatomic asplenia, including sickle cell disease or other hemoglobinopathies, congenital or acquired asplenia

Persons with immunocompromising conditions including congenital or acquired immunodeficiency (includes B or T cell deficiency, complement deficiencies and phagocytic disorders; excludes chronic granulomatous disease), HIV infection, chronic renal failure, nephrotic syndrome, leukemia, lymphoma, Hodgkin disease, generalized malignancies, solid organ transplant, multiple myeloma, or other diseases requiring immunosuppressive drugs (including long term systemic corticosteroids and radiation therapy)

## **AVAILABLE DOSAGE FROM THE HOSPITAL:**

### PNEUMOCOCCAL VACCINE

#### **DOSAGE:**

**Immunization: Note:** Efficacy of PCV13 administered <5 years after PPSV23 is unknown.

- Adults  $\geq 50$  years (manufacturers labeling): 0.5 mL as a single dose
- Adults  $\geq 19$  years with specified underlying medical conditions (CDC, 2012): Eligible adults should be vaccinated at their next pneumococcal vaccination opportunity
- Pneumococcal vaccine naive (no previous PCV13 or PPSV23 vaccine): Administer PCV13 0.5 mL as a single dose followed by 1 dose of PPSV23 8-weeks later.
- Previously vaccinated with PPSV23: PCV13 0.5 mL as a single dose  $\geq 1$  year after the last dose of PPSV23.

#### **Geriatric**

Refer to adult dosing.

#### **COMMON SIDE EFFECT:**

**All serious adverse reactions must be reported to the U.S. Department of Health and Human Services (DHHS) Vaccine Adverse Event Reporting System (VAERS) 1-800-822-7967 or online at <https://vaers.hhs.gov/esub/index> .**

##### **>10%:**

Central nervous system: Chills, drowsiness, fatigue, fever, headache, insomnia, irritability

Dermatologic: Rash

Gastrointestinal: Appetite decreased

Local: Erythema, limitation of arm motion, pain, swelling, tenderness

Neuromuscular & skeletal: Arthralgia, myalgia

#### **PREGNANCY RISK FACTORS: B**