PNEUMOCOCCAL POLYSACCHARIDE VACCINE

WHAT YOU NEED TO KNOW

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis.

1 Pneumococcal disease

Pneumococcal disease is caused by *Streptococcus pneumoniae* bacteria. It is a leading cause of vaccine-preventable illness and death in the United States. Anyone can get pneumococcal disease, but some people are at greater risk than others:

- People 65 years and older
- The very young
- People with certain health problems
- People with a weakened immune system
- Smokers

Pneumococcal disease can lead to serious infections of the:

- Lungs (pneumonia),
- Blood (bacteremia), and
- Covering of the brain (meningitis).

Pneumococcal pneumonia kills about 1 out of 20 people who get it. Bacteremia kills about 1 person in 5, and meningitis about 3 people in 10.

People with the health problems described in Section 3 of this statement may be more likely to die from the disease.

2 Pneumococcal polysaccharide vaccine (PPSV)

Treatment of pneumococcal infections with penicillin and other drugs used to be more effective. But some strains of the disease have become resistant to these drugs. This makes prevention of the disease, through vaccination, even more important.

Pneumococcal polysaccharide vaccine (PPSV) protects against 23 types of pneumococcal bacteria, including those most likely to cause serious disease.

Most healthy adults who get the vaccine develop protection to most or all of these types within 2 to 3 weeks of getting the shot. Very old people, children under 2 years of age, and people with some long-term illnesses might not respond as well, or at all.

Another type of pneumococcal vaccine (pneumococcal conjugate vaccine, or PCV) is routinely recommended for children younger than 5 years of age. PCV is described in a separate Vaccine Information Statement.

3 Who should get PPSV?

- All adults 65 years of age and older.
- Anyone 2 through 64 years of age who has a long-term health problem such as:
  - -heart disease
  - -lung disease
  - -sickle cell disease
  - -diabetes
  - -alcoholism
  - -cirrhosis
  - -leaks of cerebrospinal fluid or cochlear implant
- Anyone 2 through 64 years of age who has a disease or condition that lowers the body's resistance to infection, such as:
  - - Hodgkin's disease
  - - lymphoma or leukemia
  - - kidney failure
  - - multiple myeloma
  - - nephrotic syndrome
  - - HIV infection or AIDS
  - - damaged spleen, or no spleen
  - - organ transplant
- Anyone 2 through 64 years of age who is taking a drug or treatment that lowers the body's resistance to infection, such as:
  - - long-term steroids
  - - certain cancer drugs
  - - radiation therapy
- Any adult 19 through 64 years of age who:
  - - is a smoker
  - - has asthma

PPSV may be less effective for some people, especially those with lower resistance to infection.

But these people should still be vaccinated, because they are more likely to have serious complications if they get pneumococcal disease.

Children who often get ear infections, sinus infections, or other upper respiratory diseases, but who are otherwise healthy, do not need to get PPSV because it is not effective against those conditions.

4 How many doses of PPSV are needed, and when?

Usually only one dose of PPSV is needed, but under some circumstances a second dose may be given.

- A second dose is recommended for people 65 years and older who got their first dose when they were younger than 65 and it has been 5 or more years since the first dose.
- A second dose is recommended for people 2 through 64 years of age who:
  - have a damaged spleen or no spleen
  - have sickle-cell disease
  - have HIV infection or AIDS
  - have cancer, leukemia, lymphoma, multiple myeloma
  - have nephrotic syndrome
  - have had an organ or bone marrow transplant
  - are taking medication that lowers immunity (such as chemotherapy or long-term steroids)

When a second dose is given, it should be given 5 years after the first dose.

5 Some people should not get PPSV or should wait

- Anyone who has had a life-threatening allergic reaction to PPSV should not get another dose.
- Anyone who has a severe allergy to any component of a vaccine should not get that vaccine. Tell your provider if you have any severe allergies.
- Anyone who is moderately or severely ill when the shot is scheduled may be asked to wait until they recover before getting the vaccine. Someone with a mild illness can usually be vaccinated.
- Although there is no evidence that PPSV is harmful to either a pregnant woman or to her fetus, it is not recommended during pregnancy. Pregnant women who have chronic illnesses should consult their provider before being vaccinated. Women who have underlying conditions known to put them at risk of pneumococcal disease should be vaccinated before becoming pregnant, if possible.

6 What are the risks from PPSV?

About half of people who get PPSV have mild side effects, such as redness or pain where the shot is given.

Less than 1% develop a fever, muscle aches, or more severe local reactions.

A vaccine, like any medicine, could cause a serious reaction. But the risk of a vaccine causing serious harm, or death, is extremely small.

7 What if there is a severe reaction?

What should I look for?

Any unusual condition, such as a high fever or behavior changes. Signs of a severe allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness.

What should I do?

- Call a doctor, or get the person to a doctor right away.
- Tell the doctor what happened, the date and time it happened, and when the vaccination was given.
- Ask your provider to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form. Or you can file this report through the VAERS website at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS does not provide medical advice.

8 How can I learn more?

- Ask your provider. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO) or
  - Visit CDC's website at www.cdc.gov/vaccines.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION