Pneumonia vaccine recommendation

Advocate Medical Group Adult Down Syndrome Center
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This is a modification of the Vaccine information statement of the Center for Disease Control based on the experience of serving patients at the Adult Down Syndrome Center. (Centers for Disease Control Pneumococcal Vaccine Information Statement http://www.cdc.gov/vaccines/hcp/vis/vis-statements/ppv.pdf)

(This recommendation does not take the place of your health care provider’s recommendation and should be discussed with your health care provider).

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.

**Pneumonia is a common problem treated at the Adult Down Syndrome Center, a frequent cause for admission to the hospital and one of the leading causes of death in patients served at the Center. People with Down syndrome have been shown to often have impaired immune systems.**

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.

3. Who should get PPSV (Pneumonia vaccine)?

• All adults 65 years of age and older. Due to early aging issues for people with Down syndrome, we recommend all adults with DS 50 years of age and older.

The following section outlines the recommendations for people without Down syndrome 2 to 64 year of age. One of the categories of conditions for which the vaccine is recommended for this age group is any condition that lowers the body’s ability to fight infection. Based on our experience, we recommend considering including people with Down syndrome in this category because of the impaired immunity often associated with Down syndrome.

• 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.

We recommend considering 2 doses 5 years apart for our patients less than 50. When a patient reaches 50, we recommend another dose if it has been at least 5 years since the last dose (or waiting until 5 years after the last dose given before age 50). Since the standard recommendation is to give a dose at age 65, consider another dose at age 65.
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.

- While there is no evidence that PPSV is harmful to either a pregnant woman or to her fetus, as a precaution, women with conditions that put them at risk for 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% develops 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?
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.