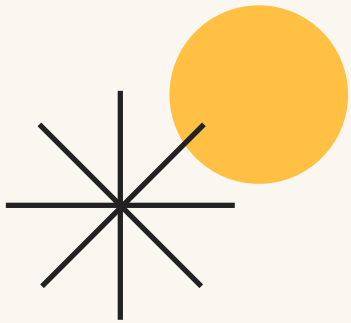
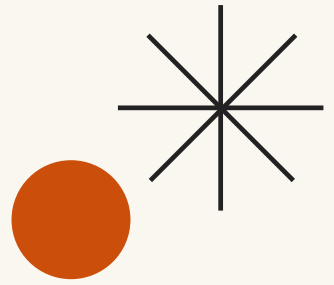


Pharm Phacts

Pneumonia



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What is Pneumonia?

- Pneumonia is an infection that can be caused by bacteria, fungi, or viruses with *Streptococcus pneumoniae* bacteria being the most common cause. This bacteria inflames the air sacs (alveoli) in the lungs and can cause the alveoli to fill with fluid or pus. This fluid causes the oxygen you breathe to have a hard time reaching the bloodstream as effectively. This can lead to symptoms such as:

- Cough, usually with phlegm which is a thick mucus in your lungs
- Fever or chills
- Nausea/vomiting
- Shortness of breath
- Chest pain

- Pneumonia itself is not contagious, but the bacteria can spread through direct contact with respiratory secretions such as saliva or mucus.

What adults can get the pneumonia vaccine?

- The CDC recommends PCV15, PCV20, or PCV21 for all adults who never received a pneumonia vaccine previously and are 50 years of age or older. If a patient receives PCV15, it should be followed by PCV23.

- Ages 19 through 49 are recommended to receive the vaccine if they have certain medical conditions such as:

- Chronic kidney, heart, liver or lung disease
 - Chronic lung disease includes COPD, asthma and emphysema
- Cochlear implant
- Diabetes
- Cerebrospinal fluid leak
- Immunocompromising conditions such as HIV, cancer, organ transplant

What are the risk factors?

- Anyone can develop pneumonia, but certain factors can increase the risk such as:
 - Age
 - Recently being sick with the cold or flu
 - Chronic diseases
 - Weakened immune system
 - Cigarette smoking which can damage the lungs
 - Having an alcohol or substance use disorder
 - Recently being in a hospital/ICU
- Patients are at high risk if they are 65 years or older, have an immunocompromising condition, or have certain chronic health conditions.

What are the different types of pneumonia vaccines?

- There are two types of pneumococcal vaccines that are used in the US:
 - Pneumococcal conjugate vaccines (PCV15, PCV20, PCV21)
- The number at the end of the vaccine tells you how many different strains the vaccine protects against.
- PCV20 and PCV21 have broader protection and do not require follow up vaccines. These two are conjugate vaccines so they are stronger and have a longer lasting immune response.
- There is no single “best” pneumonia vaccine. Which vaccine you receive depends on a number of factors such as age, immunization history, and health status.

Why should you get the pneumonia vaccine?

- According to the American Lung Association, there are 1.4 million emergency department visits with pneumonia and over 40,000 deaths due to pneumonia. 23% of adults 19–64 did not receive a pneumonia vaccine.
- Getting the pneumonia vaccine will help prevent you from a potentially life threatening bacteria that could lead to lung, brain, spinal cord or blood infections.
- By receiving the vaccine, patients will also be helping combat antibiotic resistance.
- The vaccines have been studied and have data that they are safe and effective.
- Most insurance plans cover the vaccine.



What are side effects of the vaccine?

- Most people will not experience any severe side effects after receiving the pneumonia vaccine, but some mild side effects that could occur and will usually go away within two days are:
 - Redness, swelling, pain or tenderness at the site of the vaccine
 - Fever or chills
 - Feeling tired
 - Muscle aches
- Less common, but possible side effects that would require medical attention are:
 - Severe allergic reactions (difficulty breathing, hives, swelling of face/lips/throat)
 - High fever (above 102 degrees)

Where can you get the vaccine?

- Most pharmacies and healthcare clinics will have pneumococcal vaccines. This vaccine will likely be covered under most health insurances. If a patient does not have health insurance, there are options available to access it at low or no cost.
- Many places will have a certain pneumonia vaccine that they carry. This does not mean one is better over the other, it is usually a decision the clinic/pharmacy makes depending on the amount of reimbursement insurances will give and it will vary depending on the specific vaccine.

Key Prevention Tips!

- Get vaccinated
- Wash hands regularly
- Avoid smoking
- Keep chronic conditions managed
- Try to avoid people who are sick

References:

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