

# Understanding Pneumococcal Disease



## Overview

- Pneumococcal disease can cause pneumonia, meningitis, and sepsis, and can be a serious complication of flu
- Vaccination is the best way to protect against pneumococcal disease and can help prevent severe illness and death
- While pneumococcal disease can occur at any time of the year, flu season is a good time to make sure you are up to date on pneumococcal vaccination

## Burden/Impact

- In the US, pneumococcal pneumonia causes at least 150,000 hospitalizations each year.<sup>1</sup> The death rate is higher in those age 65 years and older.<sup>2</sup> About 1 in 20 individuals who get pneumococcal pneumonia will die.<sup>3</sup>
- Pneumococcal meningitis can cause lifelong complications such as hearing loss, seizures, blindness, and paralysis
- Sepsis is a possible complication among patients hospitalized with pneumococcal pneumonia

## Symptoms

**Pneumococcal disease can strike quickly and without warning. Depending on whether the infection causes pneumonia, sepsis, or meningitis, individuals may experience some combination of the following:**



Very sudden onset of high fever, chills, cough, shortness of breath, chest pain, stiff neck, and disorientation



Symptoms may be less specific in older adults. Older adults may experience confusion or lack of alertness.<sup>3</sup>

### References

1. Centers for Disease Control and Prevention. Fast Facts You Need to Know about Pneumococcal Disease. <https://www.cdc.gov/pneumococcal/about/facts.html>. Accessed September 2021.
2. Centers for Disease Control and Prevention. Epidemiology and Prevention of Vaccine-Preventable Diseases. Pneumococcal Disease. <https://www.cdc.gov/vaccines/pubs/pinkbook/pneumo.html>. Accessed September 2021.
3. Centers for Disease Control and Prevention. Pneumococcal Disease. Symptoms and Complications. [www.cdc.gov/pneumococcal/about/symptoms-complications.html](http://www.cdc.gov/pneumococcal/about/symptoms-complications.html). Accessed September 2021.



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## Vaccination is recommended for<sup>4</sup>:



**Infants and toddlers younger than 2 years old**



**Individuals age 2 through 64 years with certain medical conditions**



**Adults age 65 years and older**

- Vaccination reduces the chances of becoming infected with pneumococcal bacteria and is associated with improved survival, reduced chances of respiratory failure or other complications, and shorter in-patient stays for adults hospitalized with community-acquired pneumonia<sup>5</sup>.
- Pneumococcal vaccines are safe and effective, but side effects may occur. Most side effects are mild such as arm swelling or soreness at the injection site, and last 1–2 days<sup>6</sup>.
- Flu season is a good time to make sure you are up to date on pneumococcal vaccination. It is also important to get an influenza vaccine every year since having the flu increases the likelihood of getting pneumococcal disease.

To learn more, visit:  
[www.nfid.org/pneumococcal](http://www.nfid.org/pneumococcal)

### References

4. Centers for Disease Control and Prevention. Pneumococcal Vaccination. [www.cdc.gov/pneumococcal/vaccination.html](http://www.cdc.gov/pneumococcal/vaccination.html) Accessed September 2021.
5. Fisman DN, Abrutyn E, Spaude KA, et al. Prior pneumococcal vaccination is associated with reduced death, complications, and length of stay among hospitalized adults with community-acquired pneumonia. *Clinical Infectious Diseases*, 2006;42:1093-1101.
6. Centers for Disease Control and Prevention. Pneumococcal Vaccine Side Effects. [www.cdc.gov/vaccinesafety/vaccines/pneumococcal-vaccine.html](http://www.cdc.gov/vaccinesafety/vaccines/pneumococcal-vaccine.html). Accessed September 2021.



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