

# Understanding Pneumococcal Disease



## Pneumococcal Disease and Influenza (Flu)

- Pneumococcal disease can cause pneumonia, meningitis, and sepsis, and is a serious complication of flu
- The best way to protect against both pneumococcal disease and flu is through vaccination, which can help to reduce severity of illness and death in the event of infection
- While pneumococcal disease can occur at any time of the year, flu season is also a good time to make sure you are up to date on pneumococcal vaccination

## The Impact of Pneumococcal Disease

- In the US, pneumococcal pneumonia causes at least 150,000 hospitalizations each year<sup>1</sup>, and about 5-7% of those who are hospitalized from it will die. The death rate is even higher in those age 65 years and older.<sup>2</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

## Pneumococcal Disease 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. [www.cdc.gov/pneumococcal/about/facts.html](http://www.cdc.gov/pneumococcal/about/facts.html). Accessed September 2020.
2. Centers for Disease Control and Prevention. Epidemiology and Prevention of Vaccine-Preventable Diseases. Pneumococcal Disease. [www.cdc.gov/vaccines/pubs/pinkbook/pneumo.html](http://www.cdc.gov/vaccines/pubs/pinkbook/pneumo.html). Accessed September 2020.
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 2020.



**National  
Foundation for  
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[www.nfid.org/pneumococcal](http://www.nfid.org/pneumococcal)

# Understanding Pneumococcal Disease

## Pneumococcal Vaccination

- Pneumococcal 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>
- There are two types of pneumococcal vaccines currently recommended in the US: pneumococcal conjugate vaccine (PCV13) and pneumococcal polysaccharide vaccine (PPSV23)<sup>6</sup>
- Both pneumococcal vaccines are safe and effective, but side effects can occur. Most side effects are mild such as arm swelling or soreness at the injection site, and last 1-2 days<sup>7</sup>

## Safe and Effective Pneumococcal Vaccines for Children and Adults

### PCV13

- All children younger than age 2 years
- Individuals age 2-64 years with certain medical conditions
- Adults age 65 years and older should talk to a healthcare professional about PCV13
- Healthy children age 2-4 years who are unvaccinated or who did not complete the recommended series should also receive PCV13

### PPSV23

- All adults age 65 years and older
- Individuals age 2-64 years with certain medical conditions
- Adults age 19-64 years who smoke cigarettes

**For more information about pneumococcal disease visit:  
[www.nfid.org/pneumococcal](http://www.nfid.org/pneumococcal)**

#### References

- Centers for Disease Control and Prevention. Vaccine Recommendations and Guidelines of the ACIP. Pneumococcal ACIP Vaccine Recommendations. [www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/pneumo.html](http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/pneumo.html). Accessed September 2020.
- 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.
- Centers for Disease Control and Prevention. Adults: Protect Yourself with Pneumococcal Vaccines. [www.cdc.gov/features/adult-pneumococcal/](http://www.cdc.gov/features/adult-pneumococcal/). Accessed September 2020.
- 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 2020.



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