



What is pneumococcal disease?

Pneumococcal disease refers to a number of different types of infection due to the bacteria *Pneumococcus* (also called *Streptococcus pneumoniae*).

In children less than 5 years of age, *Pneumococcus* is the most common bacterial cause of:

- otitis media (middle ear infection)
- pneumonia (lung infection)
- bacteraemia (infection of the blood stream)
- meningitis (a life threatening infection of the lining of the brain).

The symptoms of pneumococcal disease depend on the site of infection. The symptoms are not the same as meningococcal disease and a skin rash is NOT common with pneumococcal disease.

Who is at greatest risk of pneumococcal disease?

- All otherwise healthy children under 2 years of age.
 - Over 200 children are admitted to hospital in NSW every year with serious pneumococcal disease.
 - 20 children will develop pneumococcal meningitis and up to a quarter of these children will suffer severe hearing loss or brain damage.
 - 2 children will die in NSW each year from pneumococcal disease.
 - Thousands of children will receive antibiotics to treat a middle ear infection due to infections caused by the *Pneumococcus* bacteria and some of these children will require

grommets (surgically implanted ventilatory tubes for the middle ear).

- Children with specific risk factors (see Fact sheet "Pneumococcal vaccine and your child").
- Adults with:
 - diabetes, chronic lung, heart or kidney disease
 - alcohol-related problems, cigarette smokers
 - their spleen removed or a spleen which does not work well
 - weakened immune systems from disease or immune suppressive medications.
- All adults over 65 years and Aboriginal or Torres Strait Islanders over 50 years of age.
 - Over 400 adults are admitted to hospital every year in NSW as a result of pneumococcal disease.
 - 1 in 5 adults over 65 years of age who get pneumococcal disease will die from their infection.

How do people get pneumococcal disease?

The *Pneumococcus* bacteria usually lives harmlessly in the nose and throat of healthy people, especially young children (up to 1 in 4 children in winter). In a small number of people (particularly those at increased risk – see above) the *Pneumococcus* bacteria invades the body or blood stream causing pneumococcal disease. Pneumococcal disease occurs most commonly in the colder winter months in Australia. Young children can pass the bacteria on to the elderly or those with specific risk factors.



Is pneumococcal disease preventable?

The National Health and Medical Research Council (NHMRC) now recommend a new vaccine for all children less than 2 years of age and some older children with specific risk factors for pneumococcal infection. This new vaccine is the "7-valent conjugate pneumococcal vaccine", which covers 7 of the most common strains of the *Pneumococcus* bacteria that infect children. This vaccine has a number of benefits including reducing your child's chances of getting pneumococcal bacteraemia, meningitis, pneumonia and middle ear infections. The vaccine will also reduce the chance your child will need grommets by about 20% and may even prevent your child from spreading the *Pneumococcus* bacteria to "at risk" adults such as grandparents or at risk children. The vaccine for children is new and is different from the vaccine used in adults. The NHMRC recommends that all high risk adults (see above) receive the adult 23 valent polysaccharide vaccine. Some older children with specific risk factors for pneumococcal infection may also require a booster dose with this adult vaccine. For more information about the vaccines that are available to prevent pneumococcal disease for children and high risk adults, we recommend that you see your family doctor. Please also read the Fact Sheet "Pneumococcal vaccine and your child" and visit the Immunise Australia website at <http://immunise.health.gov.au>.

**This fact sheet is for education purposes only.
Please consult with your doctor or other health professional
to make sure this information is right for your child.**

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