

# Pneumococcal disease

## What is pneumococcal disease?

Pneumococcal disease is an acute infection caused by the *Streptococcus pneumoniae* bacteria.

It can cause a variety of severe illnesses including:

- lung infection (pneumonia)
- infection around the brain (meningitis)
- blood poisoning (septicaemia)

Pneumonia is the most common type in the Northern Territory (NT).

The bacteria can also cause less severe but troubling illnesses such as sinus and ear infections.

## How it is spread

Many healthy people carry the bacteria in their nose and throat, especially young children. The bacteria can be spread to others by direct oral contact such as kissing or contact with articles soiled with infected mouth or nose secretions.

Occasionally, the bacteria will cause an infection by invading the body or blood stream. It is uncommon to get infected from a person who is sick with pneumococcal disease.

## Symptoms

The time between being infected with the bacteria and becoming sick is uncertain but may be as short as one to three days.

The symptoms vary depending on which part of the body is affected but usually a fever will be present.

Pneumonia presents as:

- shortness of breath
- cough
- fever
- lack of energy
- sometimes chest pain

Meningitis can cause:

- a headache
- stiff neck
- nausea
- vomiting
- drowsiness

## Who is at risk

Anyone can get pneumococcal disease, but some groups have a higher risk of getting sick with pneumococcal disease including:

- babies and children under 5 years
- Aboriginal people aged 50 and non-indigenous people aged 70 and over
- any person with a weakened immune system or a chronic illness
- people who smoke
- people who drink harmful amounts of alcohol
- people who have had pneumococcal disease before

Having a respiratory viral infection such as influenza may also increase the risk of being infected.

## Treatment

Pneumococcal disease is treated with antibiotics under a doctor's care.

## Prevention

There are more than 90 different types of *Streptococcus pneumoniae* bacteria. There are conjugate and polysaccharide pneumococcal vaccines, each of which is used in different circumstances.

The vaccines work in slightly different ways and protect against a different number of the pneumococcal bacteria.

### Conjugate vaccine (Prevenar 13 R)

All children are offered this vaccine free at six weeks and at four and 12 months of age. Young children with medical conditions associated with an increased risk of invasive pneumococcal disease (IPD) and all Aboriginal children in the NT receive an additional dose at six months of age.

Aboriginal adults without a risk condition are recommended to receive one dose of Prevenar 13 from 50 years of age. All non-Indigenous adults aged 70 years or over with no risk conditions should receive one dose of Prevenar 13.

## Polysaccharide vaccine (Pneumovax 23R)

Aboriginal children in the NT receive a dose at 4 and 15 years of age. Children over 4 years and adults with a risk condition including a history of invasive pneumococcal disease should receive 2 free Pneumovax 23 vaccines. There should be a minimum of 5 years between doses and a maximum of 2 doses in a lifetime. List of risk conditions can be found on the [NT Immunisation Schedule: Pneumococcal Vaccination](#).

## Side effects of the vaccine

Serious side effects are rare. Up to 10% of children may have some redness at the injection site or develop a mild fever.

In adults, local redness and soreness at the injection site for the first couple of days is common.

To find out more about the pneumococcal vaccination recommendations, talk to your doctor or go to the [Australian Government Department of Health website](#).

## How the disease can be controlled

Providing antibiotics or vaccinating people who have recently been in contact with a person infected with pneumococcal disease is not usually required (during outbreak situations vaccine may be administered to household contacts).

Lifestyle factors such as overcrowding contribute to chronic illnesses and should be addressed.

Harmful amounts of alcohol consumptions, smoking and smoke exposure increase the risk of pneumococcal disease and should be avoided.

Yearly influenza vaccination will reduce the risk of pneumococcal disease as it can be a complication that follows influenza.

## Contact

For more information, contact your nearest [Centre for Disease Control](#).

Location	Phone
Darwin (Top End Region)	(08) 8922 8044 1800 008 002
Katherine (Big Rivers Region)	(08) 8973 9049
Tennant Creek (Central Australia Region)	(08) 8962 4259
Alice Springs (Central Australia Region)	(08) 8951 7540
Nhulunbuy (East Arnhem Region)	(08) 8987 0357