Pneumonia

Summary

- Pneumonia is an infection of the lungs, caused by bacteria or viruses.
- Anyone of any age can be affected, but children under the age of four years are very susceptible.
- Certain people can be immunised against one of the most common types of bacterial pneumonia.

Pneumonia is a type of lung infection, caused by a virus or bacteria. The lungs are filled with thousands of tubes, called bronchi, which end in smaller sacs called alveoli. Each one has a fine mesh of capillaries. This is where oxygen is added to the blood and carbon dioxide is removed.

If a person has pneumonia, the alveoli in one or both lungs fill with pus and fluids (exudate), which interferes with the gas exchange. This is sometimes known as ‘consolidation and collapse of the lung’.

Anyone of any age can contract pneumonia, but it tends to be common in children aged four years and under, and in the elderly. Pneumonia can strike suddenly or gradually. With appropriate treatment, you can expect to get better in around seven to 10 days.

Symptoms of pneumonia

The symptoms of pneumonia depend on the age of the person, the cause and severity of the infection, and any existing problems with immunity. Some of the symptoms may include:

- rapid breathing
- breathing difficulties
- fever
- general malaise
- loss of appetite
- abdominal pain
- headache
- chest pain
- cough
- blue colouration of the skin around the mouth (cyanosis), caused by lack of oxygen.

Causes of pneumonia

Pneumonia can be triggered by a cold or bout of flu, which allows the germs to gain access to the alveoli. In about half of all cases, no cause is ever found. Some of the micro-organisms that can cause pneumonia include:

- **Bacteria** – symptoms include rust or green-coloured phlegm. Anyone of any age can be affected, but susceptible groups include babies, the elderly, alcoholics, and people recovering from surgery or coping with other illneses (such as lung disease).
- **Viruses** – symptoms are similar to a severe bout of flu. It is thought that around 50 per cent of pneumonia cases are caused by viral infections.
- **Mycoplasma (a special kind of bacteria)** – symptoms can include white phlegm, nausea and vomiting. Pneumonia caused by mycoplasma organisms is generally mild, but recovery takes longer.

Diagnosis for pneumonia

If your child seems to be recovering well from a cold or flu, but then relapses, they may have a chest infection. See your doctor immediately, since pneumonia can be life threatening to babies and young children.
Pneumonia is diagnosed using a variety of tests, such as general examination and chest x-rays.

**Treatment for pneumonia**

In many cases, the person’s own immune system can deal with the infection, but antibiotics may sometimes assist recovery.

Treatment depends on the age of the individual and the type of infection, but can include:

- **hospital admission** – for babies, young children and the elderly. Mild or moderate cases of pneumonia in people who are otherwise well can often be treated at home.
- **plenty of fluids** – taken orally or intravenously
- **antibiotics** – to kill the infection, if bacteria are the cause
- **medications** – to relieve pain and reduce fever
- **rest** – sitting up is better than lying down.

**Immunisation for pneumonia**

One of the most common types of bacterial pneumonia is pneumococcal pneumonia, caused by infection with *Streptococcus pneumoniae*. There are vaccines against this strain that reduce the risk of infection.

It is recommended that certain people be immunised, including:

- young children
- older people over the age of 65 years
- people with chronic illnesses, such as diabetes, asthma or respiratory disorders
- people with reduced immunity
- people who have had an organ transplant
- people who have damaged spleens or have had their spleens surgically removed
- Aboriginal and Torres Strait Islander people over the age of 50 years
- Aboriginal and Torres Strait Islander people at two years of age and older who live in remote communities.

**Where to get help**

- Your doctor
- **NURSE-ON-CALL** Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- **Lung Foundation Australia** Tel. 1800 654 301