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 removed. If a person has pneumonia, the alveoli in one or both lungs fill with pus and fluids (exudate), which hinders 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, one can expect to get better in around one week to 10 days.

Symptoms
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.

A range of causes
Pneumonia can be triggered by a cold or bout of flu, which allows the germs to gain access to the alveoli. In approximately 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 illnesses (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
If you or your child or the person you are caring for seems to be recovering well from a cold or flu, but then gets worse, pneumonia may be the cause. See your doctor immediately, since pneumonia can be life threatening.
threatening to babies, young children and the elderly.

Pneumonia is diagnosed using a variety of tests, including:
- General examination
- Chest x-rays.
- Blood tests

**Treatment**
In the days before antibiotics as many as 1 in 5 people with pneumonia could die from pneumonia and recovery was sometimes very prolonged. Antibiotics are thus a mainstay of treatment. For the most part oral antibiotics are as effective as intravenous:
- Hospital admission – for babies, young children or anyone who is very unwell. 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
- Medications – to relieve pain and reduce fever
- Rest – sitting up is better than lying down.

**Immunisation**
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.

Influenza is a common preceding viral infection. Being vaccinated against influenza can help prevent that infection and the pneumonia which may complicate it.

It is recommended that certain people be immunised, including:
- Young children
- Elderly people
- 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.

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

Lung Foundation Australia is here to help. We develop a large range of patient resources and support programs for people with lung disease. For further information, call 1800 654 301 or visit [www.lungfoundation.com.au](http://www.lungfoundation.com.au)

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