

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 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, including:

- General examination
- Chest x-rays.

Treatment

In many cases, the person's own immune system can deal with the infection, but antibiotics may 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
- 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

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
- 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.

This brochure is one in a series produced by Lung Foundation Australia to provide information on lung disease, its treatment and related issues. The information published by Lung Foundation Australia is designed to be used as a guide only, is not intended or implied to be a substitute for professional medical treatment and is presented for the sole purpose of disseminating information to reduce lung disease.

Any information relating to medication brand names is correct at the time of printing. Lung Foundation Australia has no control or responsibility for the availability of medications, which may occasionally be discontinued or withdrawn.

Please consult your family doctor or specialist respiratory physician if you have further questions relating to the information contained in this leaflet. For details of patient support groups in Australia please call 1800 654 301.

Things to remember

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.

The 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

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