

Pneumonia

What is pneumonia?

Pneumonia is a term used to describe inflammation of lung tissue usually due to an infection with bacteria or viruses. If it involves an area or lobe of the lung it is called lobar pneumonia. If it is patchy it is called bronchopneumonia. If it involves both lungs it is called double pneumonia. It is also classified as hospital acquired or community acquired.

What are the causes?

There are several causes of pneumonia including inflammation from inhalation of chemicals such as various liquids, smoke and poisonous gases such as chlorine.

However, it is usually caused by infection from a bug (germ) and includes:

- viral pneumonia (e.g. influenza)
- bacterial pneumonia (e.g. pneumococcus, haemophilus, staphylococcus)
- mycoplasma causing atypical pneumonia
- *Pneumocystis carinii* pneumonia.

The germs are inhaled into the lungs and multiply in tissue when the person's immunity cannot deal with them.

Who gets pneumonia?

It can affect people of all ages, even healthy people, but it is most severe in young children and adults over the age of 65. The risk of contracting pneumonia increases with:

- newborn and infants
- lowered resistance from diseases (e.g. heart disease, cancer, chronic lung disease)
- smoking
- poor general health from any cause
- lowered immunity (e.g. HIV infection, drugs)
- crowded living conditions, poor sanitation
- alcohol dependence
- hospitalisation including major surgery.

What are the symptoms?

Common

- Cough with sputum
- Fever with possible chills
- Shortness of breath
- Fatigue

Possible

- Chest tightness or pain
- General aches and pains

How is pneumonia diagnosed?

Pneumonia is diagnosed by the doctor listening to the chest with a stethoscope, by X-rays and by sputum culture.

What are the risks?

It is the most common cause of death in the world and mainly affects malnourished children in third-world countries without optimal medical care.

Lung complications include painful pleurisy (inflammation of the membrane covering the lung), a pleural effusion and a pulmonary abscess.

However, most cases are curable in 1 to 2 weeks with treatment.

What is the treatment?

Treatment at home

This is acceptable if you are generally healthy and the pneumonia is not severe.

- Rest is important.
- Drink lots of fluids.
- Take prescribed antibiotics, especially for bacterial pneumonia, preferably following a sputum culture to identify the bug and its sensitivity to antibiotics (as organised by your doctor). Antibiotics are now also available for other forms of pneumonia including influenza, where new anti-viral agents are used.
- Take analgesics such as paracetamol or ibuprofen.
- Avoid cough-suppressant medication.

Hospital treatment

This is advisable for moderate to severe pneumonia, for symptoms not responding quickly to antibiotics and those already in poor health. Some strains of pneumonia such as influenza can cause rapid progression to a life-threatening state, making immediate hospitalisation important.

How is pneumonia prevented?

- Avoid smoking—it damages the lung tissue.
- Obtain prompt medical attention for respiratory infections, especially if you have an existing problem.
- Immunisation:
 - Influenza—the annual 'flu' injection in autumn
 - Pneumococcus—recommended every 5 years for those over 65 years and those at risk.

