

airways windpipe (bronchi) (trachea) bronchioles luna air sacs (alveoli) diaphragm

What is pneumonia?

Pneumonia is an infection of the lungs. It affects the tiny air sacs in your lungs, which are called alveoli. When you have pneumonia, these air sacs get inflamed and fill with fluid, making it harder for you to breathe. This may cause symptoms such as cough, difficulty of breathing, and fever.3

Pneumococcal pneumonia, in particular, is that type of infection caused by the bacteria, Streptococcus pneumoniae.5-7 Other than pneumonia, Streptococcus pneumoniae also causes:



Meningitis when the tissues covering the brain and the spinal cord get infected⁵⁻⁷





Septic arthritis infection in the joints^{5,6}



In 2017,

more than

4,000 deaths

were due to pneumonia in

Singapore.4

Osteomyelitis infection of the bone and bone marrow^{5,6}

Bacteraemia blood infection5-7

Acute otitis media ear infection5,6

It is not meant to replace the advice of medical professionals.

what you can do to prevent it.



What are the other causes of pneumonia?8,9

- Other bacteria
- Viruses
- Mycoplasmas
- Fungi

How can these causative agents spread?^{3,7}



Person-to-person, via direct contact with respiratory secretions (eq, saliva or mucus)3

Worldwide facts and figures about

Pneumonia tends to be more serious in children <5 years and adults >65 years.10



The risk of hospitalization for pneumococcal pneumonia is 10 times greater for adults >65 years vs those aged 18-49.11



In Singapore, pneumonia is the 2nd principal cause of death and 3rd cause of hospitalization.4,12

Ministry of Health Singapore

How do you know if you have pneumonia?

Pneumonia is associated with common symptoms such as cough that often produces green or yellow sputum, sneezing, fever, chills, pain with breathing, rapid breathing, and fast heart rate.3,13

If it becomes worse, it may lead to any of the following:

- Bacteraemia¹³
- Empyema (infection in the space between the inner lining of the chest wall and the covering of the lungs)¹³
- Lung abscess (collection of pus in the area infected with pneumonia)13
- Cardiovascular events (an increased risk of having a heart attack after recovery)14
- Death—pneumonia is serious and can be life-threatening³

PNEUMONIA IS SERIOUS and can be life-threatening!3

Are you at risk?

Who are more at risk of pneumococcal pneumonia?^{3,13}



Babies and young children

People with weak immune system (eg, patients undergoing cancer treatment. patients with AIDS)







People COPD







Patients who recently had the flu



People with long-term health problems (ie, heart, lung, or kidney disease, diabetes)

Influenza increases your risk of pneumonia¹⁵

> An influenza infection or the "flu" increases your risk of getting pneumococcal pneumonia, which can be lifethreatening.

> > Getting a flu jab is thus important not only to prevent influenza but also to help protect you against its complications, including pneumonia.

Ask your doctor about whether you need both the flu and pneumoccocal vaccines and when best to have them administered.

How can you prevent pneumococcal pneumonia from affecting you and your loved ones?



Healthy lifestyle

Well-balanced diet with exercise can boost your immune system and fight away the disease. Also, abstaining from smoking will greatly help prevent the disease.3



Proper hygiene

Washing of hands and maintaining cleanliness in the household can control spreading of the agents responsible for causing pneumonia.3



Vaccination

Vaccines will strengthen your immune system and prevent progression of the infection.^{3,5}

Have you been vaccinated?

In Singapore, one dose each of the following pneumococcal vaccine is recommended for persons ≥65 years:16

Pneumococcal (PCV13)

Pneumococcal Conjugate Vaccine FOLLOWED BY Polysaccharide Vaccine (PPSV23)

Protect the ones you love.

Pneumococcal vaccination for high-risk person is payable by Medisave. Flexi-Medisave (for elderly patients aged ≥65 years) can also be used.^{1,2}



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