

Patient information from BMJ

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Pneumonia: do I need a vaccine?

Pneumonia is caused by an infection in your lungs. It can be very serious, especially if you're older or in poor health. So, for some groups of people, doctors recommend vaccines that help prevent it.

What vaccines work?

There are two vaccines that can help protect you against pneumonia. One is called the **pneumococcal vaccine**. The other is the **flu vaccine**.

It might sound strange to have a flu vaccine to prevent pneumonia. But having flu weakens your body. This makes you more likely to get other illnesses, including pneumonia.

Pneumococcal vaccine

The pneumococcal vaccine helps to protect against **invasive pneumonia**, a serious complication where the infection spreads from your lungs to other parts of your body.

The pneumococcal vaccine is designed to protect against the most common type of pneumonia. The vaccine contains bacteria, but these bacteria are dead and can't harm you. The pneumococcal vaccine can't give you pneumonia or any other illness.

The vaccine can cause side effects in some people, such as:

- a sore arm where you had the shot
- a fever, and
- pain in some joints and muscles.

These side effects don't usually last more than a few days.

Most people need the pneumococcal vaccine only once. You don't need a new one every year. But some people with a weak immune system or problems with their spleen need another vaccination after five years. Ask your doctor if you think this might apply to you.

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The flu vaccine

Having flu makes you more likely to get pneumonia. So, if you have the flu vaccine, it might also reduce your chance of getting pneumonia. For example, research suggests that older people who live in nursing homes are less likely to get pneumonia if they have a flu shot.

You need to get a new shot every year, usually in October or November.

The flu vaccine can't give you flu. But it can cause similar side effects to those that some people get after the pneumonia shot.

The flu vaccine is also available as a nasal spray. It contains flu viruses that are alive, but very weak. That way you build up immunity without getting sick. The spray can be given to children aged 2 and older and to adults under age 50. People must be in good health to have this vaccine.

Do I need a flu vaccine or pneumococcal vaccine?

Different countries have different recommendations about who should have these vaccines.

For example, in the UK, the pneumococcal vaccine is recommended if you:

- are 65 or older
- have a long-term health problem, such as diabetes, lung disease, heart disease, liver disease, sickle cell disease, alcoholism, leaks of cerebrospinal fluid (this fluid surrounds the brain and spine) or a cochlear implant (a device put inside your ear to help with hearing loss)
- are having treatment that affects your immune system, such as corticosteroids, radiation therapy, or chemotherapy
- live in a nursing home
- have a weak immune system (for example, if you're getting chemotherapy or steroid treatment, or you have HIV or AIDS).

There is a different type of pneumococcal vaccine that's recommended for babies. It's usually given in three doses: one at 2 months of age, one at 4 months, and one at 12 to 13 months.

A flu vaccine is recommended each year for everyone aged over 6 months. It's especially important for:

- children under age 5, but especially those under 2 years old
- pregnant women
- people aged over 50
- healthcare workers
- people of any age with certain long-term (chronic) conditions, such as asthma, diabetes, or heart disease
- people who live in nursing homes and other long-term care facilities

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- anyone who comes in to regular contact with, or looks after, children who are younger than 6 months old (these children are too young to be vaccinated)
- anyone who has contact with someone who could get serious health problems if they get the flu.

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