

Patient information from BMJ

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Chickenpox vaccine

The chickenpox vaccine is designed to protect against infection with the virus that causes chickenpox.

In the US this vaccine is recommended for young children. And catch-up vaccination is recommended for older children, teenagers, and adults who were never vaccinated and who have not had chickenpox.

What is chickenpox?

Chickenpox in children

Chickenpox is a common infection. It is caused by a virus called **varicella zoster**. The most common symptoms are a **mild fever and a rash**, which usually clear up after a few days.

The illness is usually mild and, after being infected, children are **immune** to the virus (their body is able to fight off the infection so they don't become unwell again). So children who have already had chickenpox don't need a vaccine.

Chickenpox in adults

Although chickenpox is almost always a mild illness in children, it can sometimes be serious, especially for people who catch it as adults.

More serious cases of chickenpox, which are more common in adults, can cause **pneumonia** and **meningitis**, which can both be fatal.

Chickenpox can be especially dangerous for **pregnant women** and their unborn babies.

Who needs the chickenpox vaccination?

Chickenpox is not part of normal childhood vaccinations in many countries. But in the US it is recommended that children have two doses of the vaccine.^[1]

- The first dose is given at 12 to 15 months of age.
- The second dose is given at 4 to 6 years of age.

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The vaccine is also offered to children ages 7 and older and adults who have never been given a vaccine and have not previously had chickenpox.

Is there anyone who shouldn't have the vaccine?

You should not have the vaccine if you:

- Are allergic to any of its ingredients
- Have a weakened immune system. A weakened immune system means your body is less good at fighting off infections
- Are taking certain medications that affect your immune system, or
- Are pregnant. The chickenpox vaccine contains small amounts of live chickenpox virus, which is dangerous for pregnant women and their unborn babies.

The vaccine is also not recommended for very young babies.

Is it safe?

The chickenpox vaccine has been used for many years and is safe for most people. But it can cause side effects in some people. These are usually mild and only last for a short time. These side effects can include:

- Pain and redness where the injection is given (called the injection site)
- A fever, and
- A mild rash.

Very rarely, someone can have a severe allergic reaction (called **anaphylaxis**) to the vaccine. This happens to about one person in every one million who are vaccinated.^[2] The staff who give you the vaccine will have been specially trained in how to treat this type of rare reaction.

How is the vaccination given?

The vaccine is given as a shot, usually into the upper arm. For the best protection, you need two separate shots, which are given at different times. You may have the second shot a month after the first one, or the two shots may be given several years apart when given to young children.

How well does the vaccine work?

The vaccine seems to work better in younger children than in teenagers and adults. But it still protects most people against chickenpox when they have both doses, and the protection appears to last a long time.

1. Centers for Disease Control and Prevention. Varicella vaccine VIS. Aug 2021 [internet publication].

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2. McNeil MM, Weintraub ES, Duffy J, et al. Risk of anaphylaxis after vaccination in children and adults. *J Allergy Clin Immunol*. 2016 Mar;137(3):868-78.

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