

Patient information from the BMJ Group

Cold sores

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Cold sores

Cold sores are annoying and can be painful. They heal without any treatment after about a week. However, they usually come back from time to time. There are treatments that can help prevent cold sores from coming back.

We've brought together the best research about cold sores and weighed up the evidence about how to treat them. You can use our information to talk to your doctor and decide which treatments are best for you.

What are cold sores?

Cold sores are blisters that appear on your lips and around your mouth. They are caused by a **virus** called herpes simplex.



The virus that causes cold sores lives in the nerves in your face.

If you get cold sores, you were probably first infected with the virus when you were a child.^[1] You may hear cold sores called **herpes labialis** or 'fever blisters'.

There are two types of herpes simplex virus: type 1 and type 2. Type 1 mostly causes cold sores.^[2] Type 2 and type 1 can also cause sores or **warts** on the genitals. In this article we are just looking at what happens if you get type 1 virus on and around your mouth.

You can catch this virus from other people through their saliva. When you first get infected, you may or may not get symptoms.^[3] But children may have quite a serious illness when they get infected with the virus. They may get some or all of these symptoms:

- Ulcers on their tongue, on their lips, and inside their mouth

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- Pain when swallowing
- Fever
- Swollen glands in their neck
- Bad breath
- Loss of appetite
- Low energy
- Feeling irritable.

If your child seems ill with these symptoms, you should take him or her to the doctor. He or she may need treatment. To learn more, see [What treatments work for cold sores?](#)

Once you're infected, the virus remains in the nerves in your face. It can cause further episodes of cold sores at any time. There are certain things that seem to trigger new attacks:

- Throat infections
- Tiredness
- Stress
- Your periods, if you are a woman
- Sunlight
- Drugs that affect your immune system (such as **steroids**). Your immune system protects you against infection.

If you get cold sores, you can pass the virus on to other people through your saliva. ^[4] You're most likely to pass on the virus when you have cold sores. To reduce the risk of passing on the virus to other people, you should avoid kissing when you have cold sores and be careful not to share cups, cutlery, and towels. Also, avoid oral sex when you have cold sores, as the virus can sometimes cause blisters on the genitals. ^[3]

What are the symptoms of cold sores?

Cold sores usually start as red patches that swell into spots. Then they become blisters. When the blisters burst, the area around them becomes an open sore. Some people also get a fever. Your skin returns to normal within about a week to 10 days. You'll probably get cold sores on one side of your mouth and in the same place each time.

Cold sores

Some people get warning symptoms about two days before their blisters appear. You may have an itching, burning, or tingling feeling on your lips.

How common are cold sores?

Cold sores are common.

One study found that 3 in 10 young adults in Europe reported getting cold sores. ^[5]

What treatments work for cold sores?

Cold sores usually clear up without any treatment in seven to 10 days. But there are certain treatments that may help prevent and treat attacks.

- Using a sunscreen on your mouth and lips when you're outside is likely to help reduce the chances that you'll get a cold sore, because sunlight is a common trigger for cold sores.
- You can try an antiviral cream as soon as you feel a cold sore coming on. But the research isn't clear about how well this treatment works.
- Taking antiviral tablets as soon as you get cold sores might help to reduce your symptoms and help your cold sores heal. But tablets are only prescribed to people who have a weak immune system or who get a very severe attack of cold sores. Children may also be treated with antiviral tablets.
- If you take antiviral tablets when you don't have any cold sores, they can reduce the risk of getting cold sores. But tablets are only prescribed for people who get very bad attacks of cold sores.

Which treatments work best? We've looked at the best research and given a rating for each treatment according to how well it works.

Treatment Group 1

Treatments for cold sores

Treatments that are likely to work

- [Sunscreens](#)
- [Antiviral tablets](#)

Treatments that need further study

- [Antiviral creams](#)
- [Painkilling creams](#)

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- [Zinc oxide cream](#)

Other treatments

We haven't looked at the research on this treatment in as much detail as we've looked at the research on most of the treatments we cover. (To read more, see Our method.) But we've included some information because you may have heard of it or be interested in it.

- [Cold sore patch](#)

What will happen to me?

Cold sores clear up without treatment in about a week to 10 days.

Cold sores don't leave a scar. ^[6]

Most people who are infected with the **virus** that causes them (the herpes simplex virus) get cold sores every year. ^[7] Up to 1 in 10 people get cold sores six or more times a year. ^[7]

The virus that causes cold sores can cause a serious **infection** if it spreads to your eyes. It can result in blindness, but this is rare. People who have a weak **immune system** (doctors call this being **immunocompromised**) can also get a more serious illness from the herpes simplex virus. If you have a condition that means you have a weak immune system (cancer or **HIV**, for example) and you get symptoms of herpes simplex infection, including cold sores, you should see your doctor.

Treatments:

Sunscreens

In this section

If you find that sunlight triggers cold sores, it's probably worth trying sunscreens to see if they help. There's some evidence from two studies that using sunscreens on your lips and mouth can help to reduce the chances of cold sores appearing. ^[8] ^[9]

Antiviral tablets

In this section

Doctors don't normally prescribe antiviral tablets for cold sores. But they are used for babies, children, and adults who get a very bad attack of cold sores. They are also prescribed for adults who have a weak immune system (for example, if they have **HIV** or cancer). ^[10]

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The medicine that doctors normally prescribe is called aciclovir. Other antiviral medicines include famciclovir (brand name Famvir) and valaciclovir (Valtrex). If you cannot swallow tablets or if the prescription is for a baby or young child, your doctor can prescribe this medicine as a liquid.

There is good research to show that antiviral tablets can help to treat cold sores.

We found two good-quality studies ([randomised controlled trials](#)) of children who had their first infection with the herpes simplex virus (the virus that causes cold sores).^[11]
^[12] They had infections in their gums or mouth. Antiviral tablets reduced pain and sped up healing.

Studies in adults show that taking antiviral tablets can reduce the number of times someone gets cold sores and how long their symptoms last (from about eight days to six days).^[13] ^[14] ^[15] ^[16] ^[17]

Taking antiviral tablets just before symptoms appear (when many people get warning symptoms such as tingling), or as soon as symptoms appear, can speed up recovery. This means that symptoms may last a few days less than they would if you didn't take the tablets.^[18] ^[19] ^[20]

These tablets have side effects. They can cause headaches, nausea, and diarrhoea.^[19] They can also cause an upset stomach, a dry mouth, and wind, but these side effects are less common.^[21]

Antiviral creams

In this section

You can buy these creams over the counter at the pharmacy. They include aciclovir (brand names include Zovirax, Avert, Soothelip, Virasorb) and penciclovir (Fenistil). It's possible that this treatment can make your cold sores less painful and help them heal more quickly. But there hasn't been enough good research to say for certain how well it works.

One large study (a [randomised controlled trial](#)) found that putting an antiviral cream on your cold sores may help to lessen the time they are painful.^[21] Other studies show that antiviral creams can help cold sores heal more quickly.^[21] ^[22] ^[23] ^[24] ^[25] ^[26] ^[27]

In all the studies, the effects were quite small. The creams may reduce pain for just a few hours, compared with having no treatment. There's no research to say whether or not antiviral creams can help to prevent attacks, or that they can help treat the first infection with the virus.

One study looked at skiers whose cold sores often returned when they went out in sunlight.^[28] Using an antiviral cream 12 hours before sun exposure, and for several days after, seemed to help prevent cold sores. About 2 in 10 people got a cold sore if they used an

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antiviral cream, compared with 4 in 10 people who were given a dummy cream (a placebo). However, another study found that an antiviral cream didn't prevent cold sores being triggered by light.^[29] It didn't improve pain or healing times either.

Antiviral creams can make your skin red and itchy.^{[22] [30] [31]}

Painkilling creams

In this section

There has been one small study of a cream called tetracaine (also called amethocaine).^[32] It is a local anaesthetic. It seemed to make cold sores lose their scabs about two days earlier. But we don't know whether this speeds up recovery.

Zinc oxide cream

In this section

One small study (a randomised controlled trial) showed that putting zinc oxide cream on cold sores helped them heal more quickly.^[33] But we need more evidence to know for certain.

You can buy zinc oxide creams from a pharmacy without a prescription. It's a type of barrier cream and is often used to treat nappy rash in babies.

In the study, people who used zinc oxide cream complained that it caused burning, itching, stinging, and tingling.^[33]

Cold sore patch

In this section

This is a newer treatment that involves placing a thin patch over the cold sore. The patch contains a gel called hydrocolloid, which is often used to treat skin wounds. The brand name is Compeed Total Care.

The aim of the patch is to hide the cold sore while helping it to heal, but not much research has been done on it. We found one study (a randomised controlled trial) that included around 350 people with cold sores.^[34] Half of the people used the patch and half used an antiviral cream called [aciclovir](#). The cold sores healed in the same amount of time with either treatment.

Further informations:

Glossary:

viruses

Cold sores

Viruses are microbes (tiny organisms) that need the cells of humans or other animals to exist. They use the machinery of cells to reproduce. Then they spread to other cells in the body.

warts

Warts are small lumps that can grow on your skin. Warts are often caused by an infection with a kind of virus called a papillomavirus.

steroids

Steroids are a type of chemical. Your body naturally produces steroids, which play a part in many of its processes. For example, steroids are involved in how your immune system, reproductive system and metabolism work. Steroids can also be given as medicines and are used for a number of different conditions: including asthma, rheumatoid arthritis and eczema. Corticosteroids are not the same as the steroids used by some body builders and athletes. Those steroids are called 'anabolic steroids'.

infection

You get an infection when bacteria, a fungus, or a virus get into a part of your body where it shouldn't be. For example, an infection in your nose and airways causes the common cold. An infection in your skin can cause rashes such as athlete's foot. The organisms that cause infections are so tiny that you can't see them without a microscope.

immune system

Your immune system is made up of the parts of your body that fight infection. When bacteria or viruses get into your body, it's your immune system that kills them. Antibodies and white blood cells are part of your immune system. They travel in your blood and attack bacteria, viruses and other things that could damage your body.

HIV

HIV stands for human immunodeficiency virus. It's the virus that causes AIDS. It makes you ill by damaging cells called CD4 cells. Your body needs these cells to fight infections. You can get HIV by sharing needles for injecting drugs, or by having sex without a condom with someone who has the virus.

randomised controlled trials

Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

placebo

A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

local anaesthetic

A local anaesthetic is a painkiller that's used to numb one part of your body. You usually get local anaesthetics as injections.

randomised controlled trials

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