

Patient information from the BMJ Group

Scabies

In this section

[What is it?](#)

[What are the symptoms?](#)

[How is it diagnosed?](#)

[How common is it?](#)

[What treatments work?](#)

[What will happen?](#)

[Questions to ask](#)

Scabies

Scabies is a skin infection that makes you extremely itchy. It's caused by tiny creatures called mites that live under your skin. Scabies won't go away on its own, so you'll need to see your doctor to get it treated. Because scabies spreads very easily from one person to another, it's important to treat all the people you live with.

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

What is scabies?

Scabies is a skin infection that can make your whole body extremely itchy. It's caused by tiny creatures called mites burrowing under your skin. You might feel upset or embarrassed by the thought of mites living in your skin. But scabies is not a sign of poor hygiene. Anyone can get it.

You won't usually be able to see the mites that cause scabies. They're about the size of a pinhead. They make tunnels under the skin and lay their eggs in them. ^[1] Sometimes you can see the tunnels. They look like fine silvery lines on your skin. ^[2] ^[3]



A scabies rash looks like tiny insect bites or spots.

Most people who have scabies have fewer than 12 mites. But people with a severe type of scabies (called Norwegian or crusted scabies) can have thousands of mites. ^[3] To learn more, see [What are the symptoms of scabies?](#)

Scabies

The mites can only live on people. If they're scratched off, they die after two or three days.^[1] Mites can live on sheets, towels and clothes, but not for very long.

Scabies makes you itch because you have an allergic reaction to the mites.^[1] ^[2] ^[3] ^[4] But it can take several weeks before this reaction happens and you start to feel itchy.^[3]

Scabies spreads very easily from one person to another. You can catch it by touching someone who's infected. But you need to touch them for quite a long time. So you won't usually catch scabies by shaking someone's hand. But you can catch it by holding hands or from a sexual partner. You can also get scabies by sharing clothes, towels, and bedding with an infected person. But you're less likely to catch scabies this way than from touching someone.^[2] ^[3] Once you have scabies you can pass it on to other people.

Because it spreads so easily, once someone in your household has scabies, it's likely that other people will have it too.

Some people are more likely to catch scabies because they're in close contact with lots of other people. This includes:

- Children (nurseries and schools sometimes have outbreaks of scabies)
- Young mothers
- Sexually active young adults
- Elderly people in nursing homes.

What are the symptoms of scabies?

The first thing you'll usually notice when you have scabies is that your skin is extremely itchy. The itching is often worse at night and might keep you awake. You'll also get a rash, which looks like tiny insect bites or spots. If you scratch a lot, you may get crusty sores as well.

Your whole body may feel itchy. But you will probably notice a rash in just a few places:^[5] ^[6]

- Between your fingers
- Around your wrists
- In your groin
- Around your genitals
- Between your toes

Scabies

- Around your ankles
- Around your nipples
- Around your bottom.

Adults don't usually get a rash on their head or neck. But children often get a rash over most of their body.

People with a weak immune system, such as elderly people and those with HIV, can get a more serious type of scabies, called **crusted scabies** or **Norwegian scabies**. The rash looks scaly or crusty and covers a much larger area of skin than ordinary scabies. This type of scabies is harder to treat and spreads extremely easily.^[7]

Don't try to guess whether the rash is caused by scabies. See your doctor to find out what's causing your symptoms. Your doctor may be able to diagnose scabies by looking at your skin and asking you about your symptoms. He or she may also ask you if other people in your household have similar symptoms.

Sometimes doctors scrape an area of skin onto a glass slide. They can then look for the mites or their eggs under a microscope. The doctor may also use a pin to get a mite from under the skin.

How common is scabies?

Scabies is common.

In the UK, scabies is more common in cities and during the winter.^[8] ^[9] There are no good, up-to-date figures to say exactly how many people get scabies in the UK, but during the 1990s, GPs recorded about 1,200 new cases each year.^[10]

Worldwide, roughly 300 million people have scabies at any one time.^[10]

What treatments work for scabies?

Scabies won't go away on its own. If you don't treat it, your symptoms will get worse. You can use medicated lotions or creams to kill the mites that cause scabies. Make sure that everyone in your household is treated at the same time. Otherwise, you could catch scabies again.

- If you think you have scabies, you should see your doctor or nurse. You need treatment to kill the mites.
- A treatment called permethrin (brand name Lyclear) works well. It comes as a cream.
- Malathion is another treatment for scabies. There's not much good research on it, but it tends to be the second choice after permethrin.

Scabies

- Another treatment called crotamiton (brand name Eurax) can help get rid of scabies, but it isn't as good as permethrin.
- It's important to follow your doctor's instructions on how to use a scabies treatment carefully. Otherwise it might not work.
- If you have the severe form of scabies, called crusted or Norwegian scabies, tablets that contain a medicine called ivermectin work well.
- Some experts say that bathing in soap and water can help prevent scabies.^[15] But we couldn't find any good research to say whether or not this is true.
- You may get itching for a week or two after the mites have been killed. This doesn't mean the treatment hasn't worked.

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 scabies

Treatments that work

- [Permethrin](#)
- [Crotamiton](#)

Treatments that are likely to work

- [Malathion](#)
- [Ivermectin tablets](#)

Treatments that need further study

- [Benzyl benzoate](#)

What will happen to me?

Scabies won't go away on its own. If it's not treated, your symptoms will keep getting worse. Scabies also spreads very easily. So, it's important to see a doctor and for everyone you live with to get treated too. Medicated lotions and creams usually kill the scabies mites.

Scabies

Scabies doesn't cause any long-term health problems. But the itching can really wear you out and make you feel depressed. Your skin can also become infected with [bacteria](#) (germs) because of the scratching.

If you have scabies, your doctor will prescribe a lotion or cream to kill the mites. He or she will tell you how to apply the treatment. It's very important to follow these directions or the treatment might not work. ^[11] ^[12] ^[13] ^[14]

You need to make sure that people you live with and your sexual partner get treated at the same time. The scabies could come back if someone is missed out. If the first treatment you try doesn't work, your doctor may prescribe a different type of lotion or cream. ^[14]

Your doctor may advise you to wash your bedding and clothes. ^[11]

It's important to know that the itching may continue for a week or two after the mites have been killed. It doesn't necessarily mean that the treatment hasn't worked.

Treatments:

Permethrin

In this section

Eight good-quality studies (called [randomised controlled trials](#) or RCTs) found that permethrin got rid of scabies after two or three weeks in nearly all the people who used it.

Studies have also found that permethrin works better than some other treatments called crotamiton and [ivermectin tablets](#). ^[10]

You can get permethrin from your doctor or you can buy it from a pharmacy without a prescription. But you should check you have scabies with a doctor or nurse before buying this treatment. It comes as a cream under the brand name Lyclear. Weaker versions are also available, but these are meant for treating head lice. They're not suitable for scabies.

You need to cover your whole body, including your neck, face, scalp, and ears, with permethrin cream. ^[16] You keep it on for eight to 12 hours and then wash it off. If you get soap anywhere on your body before you've had the cream on for eight hours, you need to put more on. You need to repeat the process seven days later.

Side effects from permethrin seem to be rare. ^[10] But you may get stinging, itching or redness where your skin has reacted to the treatment. ^[16]

Crotamiton

In this section

Scabies

This treatment can help to get rid of scabies. But it doesn't work as well as permethrin.

In one summary of the research comparing crotamiton and permethrin, 4 in 10 people were still getting itching 28 days after treatment with crotamiton. But only 1 in 10 people still had itching after treatment with permethrin. ^[17]

Crotamiton can help with itchy skin, so it's sometimes used to treat itching for people who've used another treatment, such as permethrin, to get rid of scabies. ^[16]

You can buy crotamiton at a pharmacy. It comes as a cream or a lotion. The brand name is Eurax.

Avoid putting crotamiton near your eyes and on broken skin. Ask your doctor's advice if you plan to use it on a child under age 3.

The studies we found didn't mention any side effects from crotamiton.

Malathion

In this section

You can get malathion lotion on prescription or buy it over the counter. But it's best to see your doctor or nurse to check that the problem is scabies before starting treatment. The brand names for malathion lotion are Derbac-M and Quellada M.

Malathion tends to be the second choice of treatment for scabies, after [permethrin](#). It can be used for people who can't use permethrin, or if permethrin hasn't worked. ^[16]

You need to cover your whole body, including your neck, face, scalp, and ears with the lotion. ^[16] You keep it on for 24 hours and then wash it off. During those 24 hours, if you wash any part of your body with soap, such as your hands, you need to treat that area again with malathion. You need to repeat the process after seven days.

There hasn't been any really good research on malathion as a treatment for scabies. But some lower-quality studies found that it got rid of scabies for up to 8 in 10 people within four weeks of treatment. ^[18]

The main side effect of malathion is a burning feeling on your skin. ^[16]

Ivermectin tablets

In this section

If other treatments haven't cleared the infection, or you have a more serious type of scabies called crusted or Norwegian scabies, then your doctor might prescribe ivermectin tablets. You may have to take ivermectin tablets and another treatment to clear the infection.

Scabies

Six good studies found that taking ivermectin tablets generally works well, although the results have been mixed.^[10] ^[19] One study found ivermectin tablets got rid of scabies in just 3 in 10 people, but another found it worked for 9 in 10 people who used it. Some people may find taking ivermectin tablets more convenient than using creams or lotions.

Ivermectin tablets can cause headache, dizziness, vomiting, and stomach cramps in 4 out of 100 people.^[10]

Benzyl benzoate

In this section

We're not sure if benzyl benzoate can help to get rid of scabies because there hasn't been much research on it. We found three small studies (called **randomised controlled trials** or RCTs) that compared benzyl benzoate with other treatments for scabies. One found that 8 in 10 people who used benzyl benzoate got rid of their scabies after eight days.^[10] The other two found that it worked for about half the people who used it.^[10]

^[19] But we need more research to know whether or not this treatment works.

Benzyl benzoate is not a first choice treatment for scabies. In adults it tends to be used after other treatments haven't worked. It's not recommended for children.^[16]

Benzyl benzoate comes as a lotion. The main problem with benzyl benzoate is that it can cause a burning feeling when you put it on your skin.^[16] In studies, 1 in 4 people had this problem.^[10] It may also cause a rash where you've put it on.

Further informations:

Glossary:

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.

bacteria

Bacteria are tiny organisms. There are lots of different types. Some are harmful and can cause disease. But some bacteria live in your body without causing any harm.

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.

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Scabies

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