

## Patient information from the BMJ Group

# Impetigo

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## Impetigo

Having a skin infection like impetigo can be annoying or upsetting. But it's a very common infection and usually clears up quickly with the right treatment.

We've brought together the best research about impetigo 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 impetigo?

Impetigo is an infection of the skin, usually caused by bacteria. It can be uncomfortable and some people find it upsetting, especially as it often appears on the face. It's very common among children.

The infection is usually caused by **bacteria** called *Staphylococcus aureus*. There are two forms of impetigo. The most common type is called **crusted** or **non-bullous impetigo**. That's the type we're talking about here. <sup>[1]</sup>

The other type, called **bullous impetigo**, causes large blisters that break easily. It's much less common, and mainly affects babies. <sup>[1]</sup>



Fluid from the blisters dries on the skin and forms a gold-coloured crust, or scab, that sticks to the skin.

Crusted impetigo gets its name because the infection starts as small blisters, which quickly break down. Fluid from the blisters dries on the skin and forms a gold-coloured crust, or scab, that sticks to the skin.

Impetigo is very infectious and spreads easily. You might catch it: <sup>[1]</sup>

- If you have broken skin, for example a graze or an insect bite. The broken skin lets the bacteria in.
- If you have another skin condition, for example **eczema**, which makes breaks in the skin more likely.

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- If you have a condition that makes you scratch, such as [scabies](#) infection or [head lice](#).

But lots of people get impetigo without having had any of these things.

Lots of people have *Staphylococcus aureus* bacteria living in their nose. Mostly, this doesn't cause any problems. But if you get broken skin then it's easy for the bacteria to get from your nose onto your hands and then infect your skin. Having the bacteria living in your nose may make you more likely to get impetigo. <sup>[2]</sup>

Impetigo is more common in late summer, possibly because people get more insect bites at this time of year. Also, in summer, the skin tends to be warm and moist, which helps the bacteria to grow. <sup>[1]</sup>

The fluid that makes up the crust of impetigo is likely to have bacteria still living in it. It spreads easily from person to person by touch. It spreads particularly fast among toddlers and young children, because they're more likely to touch each other's faces when playing than older children.

### What are the symptoms of impetigo?

Impetigo can affect skin anywhere on your body, but it's more common on the face. It's particularly common around the nose and mouth.

Symptoms of impetigo are: <sup>[3]</sup>

- Dark yellow or gold-coloured scabs that stick to your skin (some people say they look a bit like cornflakes)
- Sore or itchy scabs or patches on the skin.

In the early stages, the tiny blisters that form impetigo can look a little like a cold sore. But cold sores don't spread around the face like impetigo.

Usually, your GP will be able to diagnose impetigo just by looking at the scabs. <sup>[4]</sup> He or she probably won't do any tests. But if you get repeated attacks of impetigo, or if regular treatments don't work, you may need tests to find out for sure which bacteria are causing it. The doctor may take a swab from your nose, to see if you have *Staphylococcus aureus* bacteria living in your nose, or take a swab from the scabs.

If you have bacteria which cause impetigo living in your nose, you might need to use a cream inside your nostrils to get rid of it.

### How common is impetigo?

Impetigo is quite common, particularly among children.

The last figures we could find for the UK are from 1995. They showed that: <sup>[1]</sup>

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- 28 in 1,000 children aged under 4 got impetigo each year
- 16 in 1,000 children aged 4 to 15 got impetigo each year.

But research from the Netherlands shows that it may be getting more common. <sup>[1]</sup>

## What treatments work for impetigo?

The usual treatment for impetigo is an antibiotic cream or ointment. Or your doctor may prescribe antibiotic tablets instead.

## Key points about treating impetigo

- **Antibiotic** creams are likely to work for most people.
- Antibiotic creams work at least as well as antibiotic tablets. But some people need to take tablets if they have a lot of impetigo.
- If your cream or tablets haven't worked, it may be because the type of **bacteria** causing the infection has become resistant to the antibiotic. You may need to try another type of antibiotic.

As well as having treatment, it's important to try to stop impetigo from spreading between people. To find out more, see [Stopping impetigo from spreading](#) .

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 impetigo

#### Treatments that are likely to work

- [Antibiotic creams or ointments](#)
- [Antibiotic tablets](#)

#### Treatments that need further study

- [Herbal remedies](#)

## What will happen to me?

With treatment, impetigo usually goes away in a few days. But some people find it comes back again.

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Impetigo will probably go away eventually, even without treatment. But it might take two or three weeks, and it could spread further around the body.<sup>[2]</sup> People are usually advised to get treatment, partly to stop it from spreading to other people.

Impetigo doesn't usually cause other problems. Rarely it causes inflamed kidneys (called **glomerulonephritis**), which needs treatment.<sup>[4]</sup>

One problem with impetigo is that it may come back. Sometimes this is because of an underlying skin condition, like **eczema**, which means you're more likely to keep getting impetigo.<sup>[1]</sup> Or it may be because of another infection, like **ringworm** or **head lice**, that causes scratching, so the skin keeps getting broken.<sup>[2]</sup> In these cases, it's important to have the other infection or skin condition treated properly.<sup>[1]</sup>

Another problem is that some *Staphylococcus aureus* bacteria have evolved to become resistant to the usual treatment. This is called **antibiotic resistance**. It happens when a treatment is used too often, and bacteria that are no longer killed by the usual **antibiotic** start to breed. In this case, you may need to try different types of treatment.<sup>[5]</sup>

But most people find their impetigo goes away with the first skin cream or ointment that the doctor prescribes.

It can be frustrating and upsetting if a skin infection keeps coming back. You may be fed up with going to the doctor for treatment. People often feel upset when they or their children have scabs on their face, which they may be very sensitive about.<sup>[3]</sup> It's important to see your doctor again, though, so he or she can find out why you keep getting the infection, so it can be treated properly.

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## Treatments:

### Antibiotic creams or ointments

In this section

An antibiotic cream or ointment is the first treatment you're likely to be prescribed. Studies show antibiotic creams and ointments work well for many people.<sup>[4]</sup> <sup>[6]</sup>

You apply the cream or ointment to the affected areas of the skin. It usually contains an antibiotic called fusidic acid. The brand name is Fucidin.<sup>[7]</sup> You'll probably use it for about seven days. You need a prescription from your doctor for these creams and ointments.

Some doctors say you should clean off the scabs with warm soapy water, or an antiseptic solution, before using antibiotic creams. But there's no evidence to say whether this helps.<sup>[1]</sup> It can be difficult to do, especially with small children, and it can hurt.

One good-quality study showed that about 58 in every 100 people using antibiotic cream or ointment were likely to be cured of impetigo, compared with 21 in every 100 people using a dummy ( **placebo** ) cream.<sup>[6]</sup>

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However, the study didn't find that one type of antibiotic cream worked better than any other type. It said that having treatment with some types of antibiotic cream or ointment (mupirocin) may work slightly better than taking some types of [antibiotic tablets](#) (erythromycin).<sup>[6]</sup>

However, some bacteria are resistant to fusidic acid. That means they've evolved so that this type of antibiotic no longer kills them. This is becoming more common. As many as 1 in 10 people with skin infections caused by *Staphylococcus aureus* worldwide may have an infection that can't be killed by fusidic acid.<sup>[5]</sup>

People with **eczema** are much more likely to have bacteria that are resistant to fusidic acid. If you've used fusidic acid before, you're more likely to find it doesn't work if you get impetigo again. The more you use fusidic acid, the more likely the bacteria affecting your skin are to become resistant to it.<sup>[5]</sup>

If you can't use fusidic acid (because you're allergic to it, or because your type of impetigo bacteria are resistant to it), you may be treated with another antibiotic cream, or with antibiotic tablets.

Some research shows that a new antibiotic ointment called retapamulin (brand name Altargo) may help against some types of resistant bacteria.<sup>[8]</sup> <sup>[9]</sup> But it doesn't work against all types, and doctors in Scotland have been advised not to use it.<sup>[10]</sup>

Antibiotic creams and ointments can irritate the skin, causing redness or itchiness. Some people are allergic to them, although that's not common.<sup>[11]</sup>

Antibiotic creams and ointments seem less likely to cause side effects than antibiotic tablets.<sup>[6]</sup>

If your impetigo doesn't go away after a week of fusidic acid treatment, your doctor will probably prescribe antibiotic tablets.

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## Antibiotic tablets

In this section

If you or your child has a lot of impetigo, or if it's making you feel generally unwell, your doctor may suggest antibiotic tablets instead of, or as well as, [antibiotic creams or ointments](#). Your doctor is also likely to prescribe antibiotic tablets if antibiotic creams haven't worked, or if there's some reason why you can't use creams. You need a prescription from your doctor for these treatments.

You're likely to be prescribed flucloxacillin for seven days. If you can't take flucloxacillin because you're allergic to penicillin-type antibiotics, you may be prescribed erythromycin. There haven't been any studies looking specifically at flucloxacillin compared with a dummy ( **placebo** ) treatment. But other similar antibiotics have been tested, and work well.<sup>[6]</sup> <sup>[1]</sup>

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Antibiotic tablets seem to work about as well as antibiotic creams or ointments. Some types of antibiotic creams and ointments may work a little better than some antibiotic tablets, but there isn't much difference. <sup>[6]</sup>

Some doctors prescribe creams and tablets together. We don't know whether having both antibiotic tablets and creams together works better than having them separately.

Antibiotic tablets are more likely to have side effects than antibiotic creams. One review of studies found between 2 and 30 in 100 people who took antibiotic tablets had stomach upsets, like feeling sick and diarrhoea. <sup>[6]</sup>

Flucloxacillin may cause stomach upsets. Very rarely, it can cause liver disease. Doctors are advised to be careful about using it for people who have liver problems. Some people are allergic to flucloxacillin. Side effects of erythromycin also include stomach upsets.

In a few people, the impetigo doesn't clear up with antibiotic tablets. If that's the case, you may need tests to find out what type of bacteria is causing the problem. Occasionally, impetigo is caused by a type called methicillin-resistant *Staphylococcus aureus* (MRSA). This may need treating with a different type of antibiotic cream, called mupirocin (brand name Bactroban). It works about as well as fusidic acid, but fewer bacteria are resistant to it. However, because mupirocin is used in hospitals to fight MRSA, it's only used for impetigo that is caused by MRSA. That's to try to stop bacteria becoming resistant to mupirocin. <sup>[1]</sup>

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## Herbal remedies

In this section

Some people suggest using tea tree oil for impetigo. You can buy tea tree oil at health food shops and pharmacies. Tea tree oil has been shown to work against some bacteria. But we couldn't find any good research to say whether tea tree oil can help with impetigo.

Some people have allergic reactions to this kind of oil, or find that it irritates the skin. <sup>[12]</sup>

Some research suggests that a cream containing extract of tea (different from tea tree oil) can work as well as [antibiotics](#). But there are problems with the research that make it hard to rely on. <sup>[12]</sup>

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## Further informations:

### Stopping impetigo from spreading

The best way to stop impetigo from spreading around between family members or groups of friends is to be careful about washing and drying your hands. You should wash your hands with soap whenever you've touched impetigo scabs (for example, when putting on antibiotic cream).

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But it's hard to remember each time you touch your face. So regularly washing hands with soap is a good idea. One study found that a programme to encourage regular hand-washing with soap reduced the likelihood of getting impetigo by about a third.<sup>[1]</sup>

At home, it's important for anyone with impetigo to have their own towels, facecloths, and bed linen. These should be kept separate from anyone else's towels, facecloths, and bed linen.

Parents are often advised to keep their children home from school until they've been treated for impetigo.<sup>[1]</sup> But advice about this varies.<sup>[3]</sup> It may depend how old your child is. A teenager may be less likely to spread impetigo to other pupils at secondary school than a toddler at nursery, for example.

## Glossary:

### 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.

### eczema

Eczema is a very itchy rash. It may be dark and bumpy and release fluid. Scratching makes it worse. You can get eczema anywhere on your body, but it is most common on the wrists, the insides of the elbows and the backs of the knees. If you have asthma or allergies you are more likely to get eczema than someone who doesn't have these conditions.

### ringworm

A ringworm is a type of fungus that causes infections in your skin. Doctors call it 'tinea'. A ringworm infection in the foot is called 'athlete's foot'.

### antibiotics

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

### 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.

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