

Scarlet fever: frequently asked questions

What is scarlet fever?

Scarlet fever (sometimes called scarlatina) is an infectious disease caused by bacteria called *Streptococcus pyogenes*, or group A streptococcus (GAS). The same bacteria can also cause impetigo. These bacteria can be found on the skin or in the throat, where they can live without causing problems. However, under some circumstances, they can also cause diseases like scarlet fever.

Scarlet fever is characterised by a rash, which usually accompanies a sore throat, and is sometimes confused with the measles rash. The bacteria that cause the infection produce toxins (poisons), which cause a rash, a red and swollen tongue and flushed cheeks.

Scarlet fever is mainly a childhood disease and is most common between the ages of two and eight years. It was once dangerous, but antibiotic treatment means it is now much less common and much less serious, although 2,000 to 4,000 cases are diagnosed each year in England.

It is highly contagious and bacteria are carried in saliva and mucus in the nose. The disease is spread by sneezing, coughing, or breathing out. It can also be caught by direct contact with the mucus or saliva of an infected person. It takes around two to five days to develop symptoms after being infected.

If you think your child has scarlet fever, you should consult your GP.

The disease tends to be most common in the winter and spring and the treatment consists of a 10-day course of antibiotics.

How do I protect myself from scarlet fever?

Scarlet fever is spread via the mucus and saliva of infected people. It can also be caught from any drinking glasses, plates or utensils they have used. To protect yourself from getting the illness you should:

- wash your hands often
- not share eating utensils with an infected person
- wash, or dispose of, handkerchiefs and tissues contaminated by an infected person
- be aware that you can catch scarlet fever by inhaling airborne droplets if someone with the illness coughs or sneezes in the air near you

If you think you, or your child, have scarlet fever:

- see your GP or contact NHS 111 as soon as possible
- make sure that you/your child takes the full course of any antibiotics prescribed. Although you or your child will feel better very quickly after starting the course of antibiotics, you must complete the course of treatment to ensure that you do not carry the germs in your throat after you have recovered
- stay at home, away from nursery, school or work for at least 24 hours after starting the antibiotic treatment, to avoid spreading the infection

You can help stop the spread of infection through frequent handwashing and by not sharing eating utensils, clothes, bedding and towels. All contaminated tissues or handkerchiefs should be washed, or disposed of immediately.

What are the symptoms?

The symptoms are:

- the first symptoms of scarlet fever often include a sore throat, headache, fever, nausea and vomiting. After 12 to 48 hours the characteristic fine red rash develops (if you touch it, it feels like sandpaper). Typically, it first appears on the chest and stomach, rapidly spreading to other parts of the body. On more darkly-pigmented skin, the scarlet rash may be harder to spot, although the 'sandpaper' feel should be present
- fever over 38.3°C (101°F) or higher is common
- white coating on the tongue, which peels a few days later, leaving the tongue looking red and swollen (known as 'strawberry tongue')
- swollen glands in the neck
- feeling tired and unwell
- flushed red face, but pale around the mouth. The flushed face may appear more 'sunburnt' on darker skin
- peeling skin on the fingertips, toes and groin area, as the rash fades

It usually takes two to five days from infection before the first symptoms appear. However, the incubation period may be as short as one day and as long as seven days.

Scarlet fever usually clears up after a week, but it is advisable to visit your GP to get a full diagnosis and proper treatment.

How do you get it?

Scarlet fever is highly contagious. The bacteria are present in the mouth, throat and nose of the infected person and are spread by contact with that person's mucus or saliva. These might even be on cups, plates, pens, or surfaces, such as tables that might have been used or touched by someone carrying the bacteria.

You can also catch the disease by breathing infected airborne droplets produced through an infected person's coughing or sneezing.

Who is most at risk?

Scarlet fever is mainly a childhood disease, with around 90% of cases occurring in children under 10 years old. It is most common in children between the ages of two and eight years, with four-year-olds most likely to develop the illness. Occasionally, outbreaks of scarlet fever occur in nurseries and schools. Adults of all ages can also catch scarlet fever, but the disease is much less common in adults.

How is it diagnosed and what is the treatment?

Most mild cases of scarlet fever will clear up on their own, but it is still best to see your GP if you, or your child, are showing symptoms. Having treatment for the illness speeds recovery and reduces the risk of complications. You will also become non-contagious more quickly.

In most cases, doctors can diagnose scarlet fever from the symptoms alone. The diagnosis can be confirmed by taking a throat swab, which is then sent to a laboratory to identify the bacteria causing the infection. In some cases, a throat swab is not enough and a blood test may be needed.

The usual treatment for scarlet fever is a 10-day course of antibiotics. The fever will usually subside within 24 hours of starting this, but it is important to take the whole course to completely clear the germs from your throat.

If scarlet fever is not treated with antibiotics, it can be infectious for two to three weeks after the symptoms appear. Provided all prescribed antibiotics are taken as directed, most cases will not infect other people after 24 hours of treatment.

Current guidance advises that children should not return to nursery or school and adults to work until a minimum of 24 hours after starting treatment.

If you have a high temperature you should drink plenty of fluids. You can also take paracetamol or ibuprofen to bring down your temperature and relieve discomfort.

Once you have had scarlet fever you are unlikely to get it again.

What are the potential complications?

Most cases of scarlet fever have no complications at all. However, in the early stages, there is a small risk that you might get one of the following:

- ear infection
- throat abscess
- pneumonia
- inflammation of the sinuses (sinusitis)
- meningitis

On rare occasions, at a later stage the disease could lead to:

- bone or joint problems
- liver damage
- kidney damage
- acute rheumatic fever (which can damage the heart)

Patients, or their parents, should keep an eye out for any symptoms that might suggest these complications in the first few weeks after the main infection has cleared up and, if concerned, seek medical help immediately.

Where can I get more information?

If you would like more information about scarlet fever please visit the NHS Choices website: <http://www.nhs.uk/conditions/Scarlet-fever/Pages/Introduction.aspx>.

If you have any concerns about your health see your GP or contact NHS 111.

First published: March 2014

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