

Information sheet about pathogens in humans

What is scarlet fever?

Scarlet fever is one of the most common bacterial infectious diseases in children. Scarlet fever bacteria are group A streptococci that occur around the world and usually cause throat inflammation, fever and a rash. The bacteria may produce toxins, which cause the symptoms. After having had scarlet fever, sufferers are protected from getting ill with the same toxin of the causal pathogen. However, since the bacteria form different toxins, it is possible to have scarlet fever several times. Scarlet fever is highly contagious and therefore often occurs in larger numbers in community facilities such as nurseries or schools, specifically during the colder season between October and March.

How is scarlet fever transmitted?

From person to person

The bacteria are usually located in the throat area. When speaking, coughing or sneezing, the pathogens will enter the air through tiny saliva droplets and settle in the contact person's mucous membrane when inhaled. The scarlet fever bacteria may enter a person's body without them getting ill themselves. However, they can pass the bacteria on to others.

Via hands or contaminated objects

The disease can also be transmitted via hands or by shared objects such as cutlery or toys if pathogens adhere to them.

What symptoms do the sufferers show?

At first, sufferers usually experience a headache, sore throat, difficulty swallowing, chills and a rapidly rising fever. Stomach pains and vomiting are possible as well. The palate and throat are red, the tonsils are inflamed and they may be covered with a white coating.

After 1 to 2 days, a non-itchy rash develops that spreads across the entire body. The palms and soles of the feet are not affected. The cheeks are really red and the skin around the mouth is pale. The rash usually disappears again after 6 to 9 days. Some days later, the skin will flake off, particularly on the palms and soles of the feet.

Typically, scarlet fever also comes with a change in the tongue: At first it is covered with a white coating and after a few days it turns red ("raspberry tongue").

Infection with scarlet fever bacteria can lead to further health problems. These may include, for example, a deep throat infection and inflammation of the middle ear and sinuses. In rare cases, this may also cause myocarditis or meningitis. Life-threatening infections with scarlet fever bacteria are rare in Germany. A possible but very rare secondary disease is acute rheumatic fever with inflammation of the large joints and heart and impairment of the kidneys.

What's the incubation period – and how long are you contagious?

There are usually 1 to 3 days between infection and outbreak of the disease.

If scarlet fever is treated with [antibiotics](#), around 24 hours after the first dose there is no risk of infection anymore. Without antibiotics, sufferers can be contagious for up to 3 weeks after the first symptoms.

Who is particularly at risk?

Anyone can contract scarlet fever. However, it is most common among children who attend a day nursery or school.

What should I do if I fall ill?

- ▶ A throat infection with a fever and a rash should be examined by a doctor.
- ▶ Scarlet fever can be treated with antibiotics. This reduces the contagious period. It is important to follow the recommended time for taking the antibiotics, even if the symptoms improve before that.
- ▶ Sufferers should limit contact with other people as much as possible for the duration of the contagious period.
- ▶ Soft food such as porridge or soup can help make swallowing easier.
- ▶ It is important to drink a lot if you have a fever. It is best to drink water, diluted juices or herbal teas.
- ▶ Keep as much distance as possible from others when coughing or sneezing and turn away from them. Do not cough or sneeze into your hand but into disposable tissues or the crook of your arm. Tissues should be disposed of immediately into a waste container with a lid.
- ▶ Important: Wash your hands thoroughly on a regular basis with soap and water.
- ▶ The regulations set out in the German Protection against Infection Act apply in the case of scarlet fever. People with scarlet fever or suspected of having scarlet fever must not attend community facilities such as schools or nurseries for some time. Parents must inform the facility about their child's illness.
- ▶ People who work in community facilities, such as teachers or preschool teachers, must not work where they come into contact with children in their care if they have scarlet fever or are suspected of having it while they are contagious.
- ▶ The doctor treating them or the responsible health authority will decide when they can start working or attending the community facility again. This is usually on the second day after receiving antibiotics.

How can I protect myself?

- ▶ If possible, avoid contact with people who are still contagious.
- ▶ Wash your hands thoroughly on a regular basis with soap and water to avoid contact infection.
- ▶ Preventive treatment of contact persons with antibiotics is usually not necessary. It is recommended only for people at particular risk who suffer from severe underlying diseases or have a weak immune system.

There is no vaccination against scarlet fever.

Where can I get more information?

Your local health authority can provide you with further advice. It has information on the latest situation and a wealth of experience in dealing with the disease.

More (specialist) information is also available online from the Robert Koch Institute (www.rki.de/scharlach).

For more information on how hygiene can guard against infection, please visit the Federal Centre for Health Education website (www.infektionsschutz.de).



STEMPEL

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