



MRSA carriership

Information for patients

What is MRSA?

MRSA is a bacterium. The abbreviation stands for **M**ethicillin-resistant ***S**ta~~ph~~*yl***o**ccoccus ***a**ureus*. The difference between the ordinary *Staphylococcus aureus* and MRSA is that MRSA is resistant to various types of antibiotics.*

The ordinary, non-resistant form of the *Staphylococcus aureus* bacterium occurs in approximately 30% of people, in the nose and on the skin, without causing any symptoms.

MRSA is much rarer and occurs in approximately 0.2% of people (2 out of 1000).

Difference between being a carrier and infection

If cultures (smears) reveal MRSA bacteria on the body that are not causing symptoms, we call this 'colonisation' and the person is a 'carrier'.

We refer to an infection if someone develops symptoms or becomes ill due to MRSA, which is much less common than being an MRSA carrier.

What does being an MRSA carrier mean for me?

Being an MRSA carrier usually causes no problems for healthy people. However, the MRSA bacterium can be problematic for people with an increased risk of infection. It can trigger infections in people with a compromised immune system or those whose skin is damaged, for example due to a skin disease such as eczema or psoriasis, or a surgical or other wound.

MRSA transmission

MRSA can be transmitted through direct contact with contaminated skin, clothing or objects. Hospitals and care facilities take precautionary measures to protect patients with a heightened risk of infection. These precautionary measures have the aim of preventing the spread of the MRSA bacterium.

Symptoms of MRSA infection

People are usually not bothered by the presence of MRSA bacteria on the skin, but if the bacterium is able to enter the body, for example through a wound or a defect in the skin, it can cause an infection.

The *Staphylococcus aureus* bacterium can cause skin infections such as impetigo, boils or wound infections. Infections of the bloodstream, bones or lungs are rare.

The illnesses caused by MRSA are no different from those that result from the ordinary, non-resistant *Staphylococcus aureus* bacterium. But because MRSA is less sensitive to various commonly used antibiotics, treatment is more difficult. This means there is less choice of antibiotics and it is not possible to treat MRSA infections with the most frequently prescribed antibiotics (penicillins).

Treating MRSA carriers

The aim of the treatment is to get rid of the MRSA bacteria. We call this eradication therapy. It is not necessary to treat all MRSA carriers. This is a decision that you make together with your doctor.

The treatment consists of various measures to ensure that the skin and hair, as well as clothing and bedding that have been in direct contact with the skin, are thoroughly cleaned. This involves:

- Washing the skin and hair daily with disinfecting soap and shampoo.
- Spreading special cream in the nose.
- Regular changing and washing of clothing and bedding.

A course of antibiotics is often additionally prescribed.

Post-treatment checks

Following treatment, we check whether the MRSA bacteria have really disappeared. To this end, control cultures (swabs) are taken three times with at least one week between them.

If all the cultures/swabs are free of the MRSA bacterium – i.e. negative – after the third check, we can say that the treatment has been successful. Until that time, we consider you to be an MRSA carrier and if you stay in a hospital or other care facility, precautionary measures will be taken to prevent the bacterium from spreading.

To check whether or not you have once again become a carrier, we test you again after two months and then one year after you have been declared MRSA-free. This is again done by taking control cultures/swabs and testing them for MRSA.

Precautionary measures relating to MRSA carriers

If you stay in a hospital or care facility and you are an MRSA carrier, precautionary measures will be necessary to prevent the spread of the MRSA bacterium. The measures are as follows:

- We ask you to report that you are an MRSA carrier when you are admitted to a hospital, outpatient clinic or Accident & Emergency.
- We record in the electronic patient dossier (EPD) that you are an MRSA carrier.
- If an MRSA carrier is admitted to hospital, we take isolation measures. For example:
 - Care in a single room.
 - An isolation card with isolation measures is hung on your door.
 - Staff wear an apron, mouth and nose mask, gloves and possibly a hair cover.
 - Visitors must follow certain rules. For more information, please ask one of the nursing staff in the department.

No additional measures are necessary outside a hospital or care facility, apart from proper hand-washing and hygiene. For more information about good hand hygiene, please see www.mrsanetwerk.nl.

Frequently asked questions and answers

- **Where did I contract MRSA?**
 - MRSA occurs in foreign hospitals; in the Netherlands, it can be found in livestock (pigs and cattle). You therefore have an increased risk if you have stayed in a foreign hospital or if you work with livestock. It is often not possible to find out where someone contracted MRSA. Luckily, this has no consequences for treatment.
- **How is MRSA transmitted?**
 - The MRSA bacterium is transmitted by skin-to-skin contact or contact with contaminated clothing or objects. Outside hospital, no extra hygiene measures are necessary apart from the advice about good hygiene, including hand hygiene.
- **May I receive visitors at home?**
 - Yes, you can receive visitors at home as normal. Apart from good hand and general hygiene, no special measures are needed.
- **As a pregnant woman, do I run a greater risk of MRSA infection?**
 - Pregnant women run no greater risk of being infected with MRSA. If you are pregnant and an MRSA carrier, this does not present any risk to the unborn child. If you or someone in your vicinity is an MRSA carrier, we would advise you to discuss this with your midwife or gynaecologist.
- **Can my child go to school?**

- Children who are MRSA carriers can go to school as usual. However, if there is an infection, such as impetigo caused by MRSA, you must wait until the first 24 hours of treatment with antibiotics have passed before your child can return to school.
- **As an MRSA carrier, may I go to work?**
 - That depends on the sector in which you work.
If you work in the care sector (e.g. hospitals, nursing homes or other care facilities, or the ambulance service), it is best if you contact your employer and/or company doctor. If your partner works in the care sector, the same applies to him or her.
As for other sectors, you can go to work normally and you do not have to report that you are an MRSA carrier.

Do you have any more questions?

If you would like to have additional general information about MRSA, you can, for example, go to the regional website www.mrsanetwerk.nl of the Holland-West partnership.

On the website, you can send questions about MRSA by e-mail to the regional team of experts.

For more information, you can also go to the website of the National Institute for Public Health and the Environment (RIVM): www.rivm.nl.

For further questions, please contact your general practitioner or your attending physician at the outpatient clinic for Internal Medicine or Infectious Diseases.