



Het project wordt gesubsidieerd door de Europese Unie in het kader van het Communautaire Initiatief INTERREG-IIIa met middelen van het Europees Structuurfonds voor Regionale Ontwikkeling alsmede het Ministerie van Economische Zaken van de Duitse deelstaat Nordrhein-Westfalen.



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EUREGIO

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Please note that due to the special crossborder situation, the MRSA Q&A are only valid for the EUREGIO Twente/Münsterland.

What does MRSA stand for?

Staphylococcus aureus are bacteria which naturally live on the mucus membrane of the anterior nares (vestibula nasi) and, less frequently, on the skin. Every third human being is physiologically colonized by *S. aureus*. Although *S. aureus* are usually only colonizing humans, infections might occur under certain circumstances. Such infections can be mild (abscess, pus formation, etc.), but in cases of a weakened immune system, they can lead to serious infections such as blood poisoning and/or pneumonia. In the case of an infection, antibiotics help to eliminate the bacteria. Some *S. aureus* strains have developed resistance to the antimicrobial agent "methicilline" and most other antibiotics. Such Methicilline resistant *S. aureus* strains are called **MRSA**.

Are there risk factors which facilitate that a person becomes an MRSA carrier or which indicate MRSA carriage at the time of hospital admission?

Yes. MRSA can establish itself with particular ease on the skin or in the nares, if special, so-called risk factors for MRSA infection are present. Patients sharing such risk factors at the time of admission are more likely to be MRSA colonized.

These factors are:

- A history of MRSA carriage (positive MRSA clinical history); i.e. patients once identified as MRSA carriers, even if a successful decontamination was achieved intermittently.
- Contact with an MRSA carrier,
- Hospitalization (>24 h) within the last 6 months in a German hospital (exception: Hospital is known to be MRSA free).
- Living in an old persons' residential home/ nursing home within the past 6 months (exception: the home is known to be MRSA free).
- Hospitalization abroad (exception: the Netherlands, Scandinavia).
- Antibiotic therapy within the past 6 months.
- Chronic need of nursing care.
- Catheters (urinary catheters, feeding tubes, vascular catheters...).
- Chronic hemodialysis
- Open chronic wounds, deep soft tissue infections or ulcera

If one or more of these risk factors are present, a screening for MRSA carrier status should be performed at or before hospital admission.

Which preventive measures can hinder a spread of MRSA in a hospital? What happens if a patient is proven to be MRSA colonized?

- MRSA patients are nursed in a single room (or in a room shared with other MRSA carriers) in order to prevent the spread of the germs to other persons. Such rooms should have an anteroom.
- The personnel enters with a protective gown, mouth/nose mask, gloves, and if necessary, a hair protection. Before the personnel or you leave the room or the anteroom, a hand disinfection is carried out and protective clothing is discarded.

- Visitors must also wear protective clothing and disinfect their hands when leaving the room.
- If necessary, decontamination or curative therapy (see below) will be carried out.
- Swabs will be taken from your nose and throat, from the axillary and inguinal skin or, if applicable, from perineum and from wounds. These will be tested in the laboratory. If in three successive series of swabs no MRSA are found, you will be considered provisionally "MRSA negative" and the special hygiene measures can be repealed.
- Remember to repeat these controls in ambulatory care 2 or 3 times within the next 12 months to ensure that the results remain negative.
- Whenever you attend a doctor and whenever you are hospitalized, please mention that you were previously MRSA positive in order to permit tests to ensure that you are no longer infected. This procedure is necessary for your own protection.
- These are the most important measures. Further precautionary measures will gladly be explained to you by the nurses and physicians.

What does the term "MRSA contact-patient" mean?

MRSA contact-patient means that you share or shared a room with an MRSA carrier. Thus the possibility exists that you also are infected. In order to exclude or confirm this, swabs must be taken from you and tested for the presence of MRSA. For future admissions to a hospital, please declare that you have been in contact with an MRSA patient so that your infection status can be examined for your own protection and for the protection of your fellow patients.

How can MRSA be transmitted and how can such transmission be avoided?

MRSA are usually transmitted via direct contact (hand to hand). Rarely, transmission via droplets may occur. For preventing a transmission it is crucial to know, whether someone is an MRSA carrier or not. Therefore, it is of major importance to screen patients for MRSA carriage. Additionally, mainly in the hospitals, special precautionary measures (Protective gown, mouth protection, gloves, if necessary hair protection, single room, etc.) are then applied in order to prevent a spread to other patients. Most of these extended measures are not necessary in old peoples' residential homes/ nursing home, in general practices, in patient transfer services or at home. Outside the hospitals standard hygiene (avoidance of contact to wounds, following correct, hand hygiene etc.) is effective and usually sufficient to prevent transmissions of MRSA.

In the context of MRSA, what does "curing", "decontamination" or "healing" or "eradication therapy" mean?

The so-called cure or curing therapy or decontamination aims at the elimination of the MRSA bacteria from the skin and the mucous membranes. In healthy humans without risk factors, MRSA can easily be removed from its main reservoir, the anterior nares (vestibula nasi).

For this purpose antibiotic or antiseptic nasal ointments are used. Within a few days the MRSA is eliminated and the success of the treatment can be confirmed with swabs. The success rate of this simple treatment is very high and permanent. If patients are attached to risk factors (e.g. wound, catheter, etc.) cure can be hindered until the risk factor is removed. Nevertheless, a curing therapy/decontamination, even in this case, might be effective for reducing the number of colonizing bacteria and thereby prevent infections.

Is it dangerous to have contact with an MRSA patient?

For healthy people, the risk of developing an MRSA infection, despite a residual risk, is extremely small. As long as relatives and visitors are healthy, they are unlikely to be harmed. Normal contact, hand shaking and embracing have no risk. After contact, the hands should be washed, in hospitals disinfected.

I am MRSA carrier and I will be dismissed soon from hospital. Should I do something to protect my family from MRSA?

If there has not been started a MRSA decontamination, this should be started then by your general practitioner (GP). If you are colonised or infected by MRSA, you should pay attention to the following measure in order to protect your family from MRSA.

- Practice good personal hygiene, follow instructions from your doctor, cover infected wounds.
- Please tell nurses or physician at every hospitalization that you once were identified as an MRSA carrier. This will allow the implementation of preventive measures and curing/decontaminative therapies.

More Information: In case of any question, please refer to info@mrsa-net.org or call our **MRSA-net Helpdesk** in The Netherlands (+31)-53-852 6300 or in Germany (+49)-251-83 52317