# MDRO patient information - information sheet for parents, caregivers and visitors

Dear patients, parents and caregivers,

You have been informed that you, your relative or your child is a carrier of a multidrug-resistant organism (MDRO) or is suffering from an MDRO infection. It is possible that contact occurred unknowingly, e.g. via a neighbour in the same room. Therefore, certain measures must be taken to ensure the greatest possible safety for you/your relative and for the safety of the hospital environment.

This information may cause you concern. We would like to take this opportunity to explain what MDROs are and what consequences they have for patients and their families, in order to put your mind at ease.

#### What is an MDRO?

MDRO is a collective term for bacterial pathogens that are resistant to certain antibiotics, meaning that these antibiotics can no longer be used to treat infections caused by such pathogens.

The MDROs listed as pathogens below, MRSA, VRE and MRGN, are explained collectively here.

#### What is an MRSA?

MRSA stands for methicillin-resistant Staphylococcus aureus.

The bacterium *Staphylococcus aureus* is found in the nose/throat area or on the skin of many healthy people. These people are referred to as "carriers".

The bacterium is usually harmless to healthy people, but can cause infections that require antibiotic treatment, especially in people with weakened immune systems. Certain strains of *Staphylococcus aureus* are no longer susceptible to the otherwise effective antibiotic methicillin and other antibiotics in this class of drugs. These pathogens are therefore referred to as "methicillin-resistant *Staphylococcus aureus*" (MRSA).

MRSA infections can of course also be treated, but this requires special antibiotics, which may be administered intravenously only.

#### What are VRE?

VRE stands for vancomycin-resistant Enterococci.

Enterococci are bacteria that are found in the intestines of all humans.

In rare cases, and exclusively in immunocompromised individuals, they can also cause infections. The otherwise effective antibiotic vancomycin is no longer effective against certain strains of enterococci. These bacteria are therefore referred to as "vancomycin-resistant enterococci" (VRE). In this case also, antibiotic therapy with special substances is still possible.

#### What are MRGN?

MRGN stands for multi-resistant Gram-negative bacteria.

This term refers to bacteria (e.g. *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, etc.) that have developed resistance to a range of antibiotics.

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A certain percentage of the normal population carries these pathogens in their intestines without causing any problems. In such cases, treatment is not necessary. However, if an infection with these bacteria occurs, special antibiotics must be used.

### How does someone get an MDRO?

Even before admission to hospital, colonisation ("carrier status") or infection may be present without being detected. However, MRSA, VRE and MRGN can also be acquired in hospital.

Transmission between people usually occurs through contact, e.g. touching contaminated hands or contaminated objects. Hand disinfection is therefore the most important measure to prevent the spread of MDROs.

How do you test for an MDRO?

Colonisation with an MDRO is determined by targeted diagnostics (screening). This involves taking a swab from specific parts of the body. In most cases, this involves the nose, throat or anus. In the event of an infection, the diagnosis is made at the site of the infection.

#### How can an MDRO carrier status be "eliminated"?

A process involving "decolonisation" measures are carried out to eliminate **MRSA** on the skin and mucous membranes. As the pathogen is mainly found on the skin and mucous membranes, the measures target precisely these areas of the body.

This type of restoration usually takes 5 days and involves the following steps:

- The nose is treated with antibiotic/antiseptic nasal ointment
- o The oral cavity is treated with a disinfectant mouthwash solution
- The skin and hair is treated by antiseptic body washing

Information on decolonisation measures and implementation is provided by the nursing staff on site.

There are currently no effective measures for decolonisation in the case of **VRE** and **MRGN**, as these pathogens are primarily found in the gut and any measures taken would also affect the vital gut bacteria.

It is possible to eliminate any MDRO over time even without treatment.

## What measures are necessary in the hospital?

People carrying an MDRO and those infected with it are typically separated from other patients in order to minimise the risk of transmission.

The need for such isolated accommodation, whether alone or with other MDRO carriers, is determined individually by the attending physician and hospital hygiene staff.

Rooms in which isolated patients are accommodated are marked with a sign on the door.

#### What should you do as a visitor to an isolated patient?

- o All visitors must report to the ward reception desk before entering the room.
- o If visitors are staying exclusively in the patient's room, they must consult with the ward before putting on protective clothing.

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- When moving outside the room, the guidelines below apply to accompanying persons (parents).
- Visitors are instructed by ward staff to disinfect their hands regularly and are asked to do so before and after contact with patients.

# What should you do as an accompanying person (parent)?

- Parents/close contacts admitted as inpatients together with the patient may be isolated together with the patient.
- o It is not necessary to wear a protective gown while in the room.
- o The ward staff will provide instruction on hand hygiene after contact with infectious material and before leaving the patient's room.
- Outside the room, especially before entering shared areas (kitchen, etc.) and possible contact with other parents/children, a fresh disposable gown must be worn and, if necessary, a face mask must be put on.

## Can patients with a MDRO be discharged?

Patients for whom there is no medical indication for hospitalisation may also be discharged even if they are MDRO carriers.

### Is there a danger to the family?

MDROs do not pose a threat to healthy people with normal immune systems.

Dear patients, parents and caregivers,

We hope that our explanations have helped to clarify some questions and provided you with reassurance.

We wish you all a speedy recovery and lasting good health.

The Hygiene Team at Rostock University Medical Centre