



## Treatment of MRSA carriers

If you or a person living in your household is shown to be carrying Methicillin-resistant *Staphylococcus aureus* (MRSA), the Danish Health Authority recommends that your entire household simultaneously undergoes a five-day course of treatment to remove the bacterium. For livestock-associated MRSA (MRSA 398) slightly different rules apply – see the information letter about livestock-associated MRSA.

MRSA is a bacterium (*Staphylococcus aureus*) which is resistant to treatment with the usual antibiotics. The bacterium can be carried on the skin or in the nose without the person showing any signs of infection. This is called being a MRSA carrier. The bacterium can be transferred through direct physical contact between people or when touching objects, for example door handles.

A healthy person who is carrying the bacterium does not have a significant risk of becoming seriously ill. Nevertheless, the Danish Health Authority recommends that all members of the household undergo a course of treatment to remove the bacterium, and in this way prevent less serious yet troublesome infections such as boils and impetigo, and to prevent the infection being transferred to the sick and infirm who may become seriously ill if infected with MRSA.

### Period prior to decolonisation of MRSA carriers

Before starting the treatment of MRSA carriage, any other infections must be treated first. Wounds, sores and eczema must, if at all possible, have healed. Normally, swabs do not need to be taken from healthy members of a household before treatment. It is important that everyone in the household is treated at the same time – it is thus necessary to arrange with your doctor when treatment of the entire household can commence.

Until the treatment starts, the risk of infection can be reduced considerably by washing with chlorhexidine soap 4 % once or twice a week (the procedure is described on page 2) as well as covering any wounds, sores etc. with a close-fitting dressing. It is important that you wash your hands thoroughly before coming into contact with other people. For the sake of convenience, during the day it is possible to use hand sanitiser containing glycerol if your hands are clean and dry.

### During and after treatment

The risk of infection spreading is reduced significantly once the treatment has commenced.

Everyone in the household, i.e. both the person or persons who have been diagnosed MRSA-positive and the other members of the household are swabbed no

earlier than one month after the end of the treatment. Household members who have not tested positive, and who are negative at the monthly check-up, are deemed to be MRSA-free, and do not need to be checked again after another six months. Persons who were shown to be carrying MRSA must be checked again after six months. If this test is negative, the person is deemed to be MRSA-free. Persons who are found to test positive at the control swab are advised to undergo another course of treatment and follow-up. For health and care personnel, special rules apply. This should be agreed with your doctor.

## **Institutions**

As a main rule, healthy children may attend nursery, kindergarten etc. even though they are carrying MRSA. School-age children can attend school and participate in leisure activities if they have one infected sore or wound providing it is being treated and is covered with a dry, tight-fitting dressing. The same applies to school staff, see the Danish Health Authority's guidance on infectious diseases in children and young people which was published in 2013. In the case of MRSA outbreaks, for example in children's institutions, it is necessary to contact the Danish Patient Safety Authority, Supervision and Guidance.

## **Treatment guide**

The treatment of MRSA carriage takes five days and covers removal of the bacterium from the nose through the application of a special nasal ointment, from the skin and hair by washing with an antibacterial soap, as well as from the home by washing clothes and cleaning.

### **1. Nasal decolonisation**

- Nasal ointment (mupirocin 2 %, which is available on prescription) must be applied twice a day to both nostrils. The ointment must only be applied to the inside of your nostrils, and no further up than can be reached with a finger. Each person in the household must have his or her own tube.
- After applying the ointment, press the sides of your nose together. This will help to spread the ointment inside your nose.
- Afterwards, wash your hands using ordinary soap.

### **2. Skin and hair treatment**

Every day it is necessary to take a shower (not a bath), and to wash your body and hair with chlorhexidine soap 4 %.

- First wet your body and hair thoroughly.
- Wash your hair and your face, paying particular attention to the area around your nose. Avoid getting the soap in your eyes.
- If you use ordinary cotton flannels, they must be boil-washed, while disposable flannels must be disposed of immediately after use.

- Wash your armpits and then the rest of your body – paying particular attention to your navel, genitals, anus and perineum (the skin between anus and genitals).
- Rinse the soap off with plenty of water – and dry yourself with a clean towel.

To prevent dry skin, you can use chlorhexidine soap 4 % with glycerol as well as a moisturising cream after bathing. However, please note that some creams reduce the effect of the antibacterial soap. Suggestions for suitable creams that you can use can be found on Statens Serums Institut (SSI) website – or you can ask at your local pharmacy. Ordinary soap can be used for washing your hands.

Avoid wearing jewellery during the treatment, especially rings on your fingers, earrings and body piercing jewellery. During the treatment, you can use hair conditioner, deodorant, aftershave etc., but not any other soap or shampoo other than chlorhexidine soap for washing your body and hair. If the treatment causes considerable skin irritation, contact your doctor.

### **3. Home decolonisation**

- All members of the household must have their own bath towel and flannel, and it is necessary to change into clean underwear and use clean towels and flannels daily after showering.
- Everyone in the household must change their bedlinen on the second day of the treatment, and once the treatment has finished.
- Bedlinen, towels, flannels, underwear, T-towels and dishcloths must all be boil-washed after use.
- If possible, it is recommended that you wash duvets and pillows following the end of the treatment.
- Air your home daily, as well as duvets and pillows.
- All horizontal surfaces should be washed with water and soap.
- Your home should be vacuumed on the second day, and at the end of the treatment. Mattresses and upholstered furniture should also be vacuum-cleaned thoroughly.
- Items which are touched frequently, for example door handles, taps, toilet seats and toilet flush buttons should be cleaned daily.

### **Further information**

The above information can be found on the website of the Danish Health Authority together with additional information about MRSA, including the Danish Health Authority's guidance on preventing the spread of MRSA, 3<sup>rd</sup> edition, 2016 – visit [www.sst.dk](http://www.sst.dk)

More information is also available at the SSI website: [www.ssi.dk](http://www.ssi.dk)