



East Kent
Hospitals University
NHS Foundation Trust

Screening for MRSA / MSSA and CPO within the Kent Kidney Care Centre

Information for patients from the Infection Prevention and Control Team and the Renal Department

You have been given this leaflet to explain why patients having dialysis in the Kent Kidney Care Centre or affiliated Units are offered screening for MRSA, MSSA and, in selected cases CPO. This leaflet explains what treatments are offered to patients who are carriers of MRSA, MSSA, and CPO.

What are Meticillin Resistant and Sensitive Staphylococcus aureus?

Staphylococcus aureus (often called “staph”) is a bacterium or germ often found in the nose and / or on the skin of 20 to 30% of the normal healthy population.

- **Meticillin Resistant Staphylococcus aureus (MRSA)** is a strain or type of Staph that is resistant to some of the antibiotics commonly used to treat infections. People with MRSA may have acquired it before they came into hospital or while they were an inpatient.
- **Meticillin Sensitive Staphylococcus aureus (MSSA)** refers to all other strains or types of staphylococcus that are sensitive to most antibiotics commonly used to treat infections.

Most people with MRSA or MSSA are said to be “carriers” or “colonised”, which means that MRSA or MSSA in their nose or on their skin, and sometimes in wounds and other body sites, but it is not causing that person any harm.

Most people with MRSA or MSSA do not know that they have it, as it does not generally cause any signs or symptoms unless an infection is present.

What are the signs / symptoms?

MRSA or MSSA infection can occur in phlegm, urine, and blood, but more commonly in wounds, including haemodialysis lines or peritoneal dialysis catheter exit sites and chronic wounds such as leg ulcers. Signs of infection include a temperature, pain at or in the site of infection, redness / oozing from an exit site or wound, and changes found from a blood test which show that the patient is fighting an infection.

How are MRSA and MSSA found?

Swabs are taken from the patient's nose and groin to see whether or not the person is an MRSA or MSSA "carrier", and sometimes from wounds, skin breaks, or other body sites. Samples of phlegm, blood, and urine can also be taken if infection is suspected.

The Trust has **Guidance for the Management and Control of MRSA** which is based on national guidelines, and the Renal Department has separate guidelines relating to testing and treating MSSA carriage. All patients having dialysis in East Kent Hospitals and affiliated Units will be regularly swabbed for MRSA and MSSA carriage.

Are MRSA and MSSA dangerous?

MRSA and MSSA do not generally pose any risk to the general public. The people most "at risk" from MRSA and MSSA are patients with other serious illness / disease, and those with open wounds or small breaks in their skin where they have tubes, such as a drip or a drain inserted. All dialysis patients are at increased risk of MRSA or MSSA infection because of devices used for dialysis access (such as peritoneal dialysis catheters or haemodialysis lines / AV fistula needling).

Can MRSA and MSSA be treated?

People with MRSA or MSSA carriage or colonisation do not generally need treatment with antibiotics, which are only used to treat patients with infections. However, all dialysis patients of the Kent Kidney Care Centre with MRSA or MSSA carriage or colonisation will be given a five day course of decolonisation treatment to reduce the number of MRSA and MSSA bacteria they are carrying. This has been shown to reduce the amount of times dialysis patients get bloodstream infections from MSSA and MRSA.

Decolonisation treatment consists of:

- a gel or ointment, which is applied to the inside of each nostril twice a day for five days; and
- a body wash which is applied neat to wet skin, like a liquid soap and then rinsed thoroughly, once a day for five days.

If an infection is found, antibiotics may be prescribed as well.

Once a course of decolonisation treatment has been completed, swabs are repeated. In those people whose swabs again show carriage of MRSA or MSSA, further courses of decolonisation treatment (as above) may be given, up to a maximum of three courses.

Repeated tries at decolonisation are not recommended, as it is known that some people will always continue to have carriage of staphylococcus whatever treatment they have.

People with MRSA carriage or colonisation do not need treatment with systemic antibiotics (such as tablets or liquids), these are used to treat patients with infections. The use of antibiotics where they are not needed leads to more antibiotic resistant bacteria developing.

What precautions are taken in hospital and on the haemodialysis units?

Patients with MRSA may be moved to a single room to protect other patients who are very susceptible. If there are no side rooms available, patients may be nursed on the open ward with other patients who have MRSA (known as cohort nursing). Patients with MRSA can have visitors. Visitors do not need to take any special precautions, other than to clean their hands with alcohol hand rub on leaving the ward or Haemodialysis Unit.

Patients with MSSA carriage do not need to be isolated from other patients.

What are Carbapenemase-producing Organisms (CPO)?

There are many different types of bacteria that usually live harmlessly in the human gut. If these bacteria get into the wrong place (such as the bladder or bloodstream) they can cause infection. Carbapenemases are enzymes (chemicals) made by some strains of these bacteria, which allow them to destroy carbapenem antibiotics (a powerful group of antibiotics). These CPO bacteria are said to be resistant to these antibiotics. People who carry these CPOs are said to be “colonised” or “carriers”.

Although generally uncommon in the UK at the moment (including in East Kent Hospitals and affiliated Units), outbreaks of CPO's have been reported in other hospitals. CPO carriage is being found more often in a number of other European and North American countries and, especially on the Indian subcontinent.

The Trust has **Guidelines for the Early Detection, Management and Control of Carbapenemase-producing Organisms, including Carbapenemase-Producing Enterobacteriaceae**, which is based on national guidance.

What are the signs and symptoms?

Most people with CPOs are said to be “carriers” or “colonised”, which means that the germs are in their gut but not causing that person any harm. Most people with CPOs do not know that they have it as it does not generally cause any signs or symptoms, unless an infection is present.

CPO infection can be found in urine and blood, phlegm, and wounds of any description, including haemodialysis lines or peritoneal dialysis catheter exit sites. Signs of infection include a temperature, pain at or in the site of infection, redness / oozing from an exit site or wound, and changes found from a blood test which show that the patient is fighting an infection.

How are CPOs found?

Swabs are taken from the patient's anus (a rectal swab), since the bacteria commonly linked with CPOs normally lives in the gut. This swab will detect whether or not the person is a CPO “carrier”, Sometimes swabs are taken from wounds, skin breaks, or other body sites to detect carriage or infection. Samples of phlegm, blood, and urine may also be taken. In people with a stoma, the swab is dipped into the stoma bag, it is not inserted into the stoma.

Only selected groups of dialysis patients need swabbing for CPO. These include those patients who have:

- previously been told they are a carrier of CPO or they have an infection with a CPO
- had an admission to a hospital outside of Kent in the last 12 months
- returned from holiday where dialysis was needed.

Some other haemodialysis units now need patients to be swabbed for CPO carriage before accepting them for holiday dialysis.

Are CPOs dangerous?

CPOs do not generally pose any risk to the general public. The people most “at risk” from CPOs are patients with other serious illness / disease, and those with open wounds or small breaks in their skin where they have tubes such as a haemo- or peritoneal dialysis catheter, drip, or a drain inserted.

Can CPOs be treated?

People with CPO carriage or colonisation do not generally need treatment with antibiotics.

It is not possible to eradicate (get rid of) CPO in those who are carriers. There are limited antibiotics available for the treatment of infections. The Trust’s Infection Prevention and Control Team will give advice on this.

What precautions are taken in hospital and on the haemodialysis units?

Patients with CPO carriage or infection will be moved to a single room to protect other patients who are very susceptible. Patients with CPO can have visitors. Visitors do not need to take any special precautions, other than to clean their hands with alcohol hand rub on leaving the ward or Haemodialysis Unit.

Further information

For further advice on the information within this leaflet, please contact the Renal Team on the following numbers.

- **Buckland Hospital**, Dover
Telephone: 01304 222694
- **Kent and Canterbury Hospital**, Canterbury
Telephone: 01227 783047
- **Maidstone Kidney Care Centre**, Maidstone
Telephone: 01622 225901
- **Medway Renal Unit**, Gillingham
Telephone: 01634 82 51 05
- **Queen Elizabeth the Queen Mother (QEQM) Hospital**, Margate
Telephone: 01843 234270
- **William Harvey Hospital**, Ashford
Telephone: 01233 651872

This leaflet has been produced with and for patients.

Please let us know:

- If you have any accessibility needs; this includes needing a hearing loop or wanting someone to come with you to your appointment.
- If you need an interpreter.
- If you need this information in another format (such as Braille, audio, large print or Easy Read).

You can let us know this by:

- Visiting the Trust web site (<https://www.ekhuft.nhs.uk/ais>).
- Calling the number at the top of your appointment letter.
- Adding this information to the Patient Portal (<https://pp.ekhuft.nhs.uk/login>).
- Telling a member of staff at your next appointment.

Any complaints, comments, concerns or compliments, please speak to a member of your healthcare team. Or contact the Patient Advice and Liaison Service on 01227 783145 or email (ekh-tr.pals@nhs.net).

Patients should not bring large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

Further patient information leaflets are available via the East Kent Hospitals' web site (<https://www.ekhuft.nhs.uk/patient-information>).

Reference number: Web 222

First published:
December 2012

Last reviewed:
November 2022

Next review date:
March 2026

Copyright © East Kent Hospitals University NHS Foundation Trust.