University Hospitals Bristol NHS
NHS Foundation Trust

MRSA Screening Policy and Protocol

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Contents

1. POLICY STATEMENT AND PURPOSE

University Hospitals Bristol NHS Foundation Trust will comply with national requirements, guidance and current best practice in MRSA screening processes. This document sets out the MRSA screening protocol for use in the University Hospitals Bristol NHS Foundation Trust. It is based on current national guidance and an assessment of local MRSA epidemiology, and will be revised accordingly to accommodate the national requirement for MRSA screening of all admissions by 2011. The document sets out the minimum screening requirements and does not preclude clinical judgement in screening for MRSA in patients not included in identified risk groups.

The principle objectives of screening for MRSA are:

1. To identify patients who are carriers[1] of MRSA
2. To subsequently manage the care of MRSA positive patients to reduce the risk of them developing infection
3. To reduce the risk of transmission of MRSA to other patients.

In addition to the overall protocol, guidance specific to individual areas of the Trust is given within this document.

2. UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRUST MRSA SCREENING CRITERIA

Group	Rationale
All adult in-patient elective pre-operative surgery (BRI, St Michael's, BEH) including day surgery with the exceptions of: ➢ Day case ophthalmology ➢ Day case dental ➢ Day case endoscopy ➢ Minor dermatological procedures ➢ Termination of pregnancy	Covers all high risk groups and surgical patients who are at greatest risk from MRSA infection. National requirement
All patients admitted to ICUs and HDUs (including Cardiac ICU,HDU, Paediatric ICU, Neonatal ICU, Respiratory High Care, Hepatology High Care) with weekly ongoing screening	Covers all areas of the Trust where patients are at high risk from MRSA infection
All adult and paediatric patients pre-Oncology/BMT/Haematology and on 6th attendance as outpatient treatment All patients admitted to wards 61 and 62	Covers high risk groups, particularly those that could have long-term intravenous lines
All emergency adult trauma patients	Protects elective surgical orthopaedic patients
All planned admissions to Ward 37 (BRCH) and all children commenced on a dialysis programme	Covers a high risk group.
All paediatric surgical high risk patients	Covers paediatric surgery with greatest

[1] A patient who is an MRSA carrier has the bacterium present on their body but does not have any signs or symptoms of infection.

	risk of MRSA. In line with adult policy and with current UBHT policy
Paediatric patients starting home ventilation	Group at high risk of acquiring MRSA colonisation
Previous MRSA positive patients	High risk group for bacteraemia and transmission to other patients
Patients transferred from other hospitals and from abroad	Identifies patients who may have become colonised/infected prior to UBHT admission
Emergency surgical and medical patients who have been in-patients within the last 6 months	Identifies most patients who will be at highest risk of MRSA carriage
Emergency medical and surgical patients: ➢ From Nursing and Care Homes who have risk factors of wounds or an indwelling device (e.g. urinary catheter) ➢ Who are Healthcare Workers ➢ Who are intravenous drug users	Identifies most patients who will be at highest risk of MRSA carriage
Obstetric patients: ➢ Whose babies are likely to need neonatal surgery or be in Neonatal ICU ➢ Intravenous drug users	Identifies those patients most likely to be at highest risk of MRSA carriage or at risk from MRSA infection on local risk assessment
Patients transferred between hospitals within UHBristol (e.g.BRI to BGH or BRI to St Michaels)	Identifies those patients most likely to be at highest risk of MRSA carriage or at risk from MRSA infection on local risk assessment
All 'Long stay patients' ➢ All patients who have been in-patients for over 30 days must have a full screen if they have not been screened for other reasons. This should be repeated every 30 days whilst they remain inpatients	Identifies those patients most likely to be at highest risk of MRSA carriage or at risk from MRSA infection on local risk assessment

3. MANAGEMENT OF MRSA SCREENING PROCESS

3.1 Adult Surgical Patients

Timing of screens	**Elective surgical patients** ➢ Patients will normally be screened for MRSA at pre-operative assessment clinic. ➢ If the pre-operative assessment takes place more than 2 weeks before surgery the MRSA screen can be taken but patients who have screened negative for MRSA are to be contacted 2 weeks before surgery by the to review risk for MRSA. ➢ For patients undergoing elective surgery who are not attending pre-operative assessment clinic an MRSA screen 2 weeks prior to surgery is to be arranged via the

	local primary care team. ➢ Patients who are transferred directly from other in-patient providers for elective surgery are to be screened on transfer into UHBristol facilities. The transferring facility is also requested to undertake an MRSA screen when the request to transfer is made. ➢ Patients undergoing elective fast track surgery are to be screened at the point of decision to admit.
	Emergency surgical patients ➢ Patients will be screened on decision to admit in the Emergency Department or in the Surgical/Trauma admission Unit.
	Elective Cardiology patients ➢ Patients will be screened in pre-operative assessment clinic
	Elective Cardiac Surgery patients ➢ From June 1st 2009 patients will be screened in pre-operative assessment clinic ➢ Until 1st June 2009 patients will be screened on admission and will be commenced on topical treatment as prophylaxis until swab results are known
	'Treat and return' Cardiology patients ➢ A screen will be requested from the hospital at which the patient is currently resident at the point the referral is made
Results checking	**Primary responsibility for checking results and informing patients is with the Clinical Team Nurses/Doctors** ➢ The Infection Control Nurses will contact the current/most recent ward/department where a patient is located when they become aware of a new MRSA positive patient ➢ A monthly report of all MRSA positive patients will be produced by the Infection Control Team and sent to the relevant Matron/Head of Nursing for cross checking of results
Positive results	**Elective Surgical Patients** ➢ Inform patient & provide information leaflet ➢ If appropriate patient to commence UHBristol decolonization/suppression therapy ➢ Decolonisation/suppresion therapy should be timed to ensure surgery is performed on Day 5 of treatment ➢ Patient can collect treatment pack from pharmacy or fax protocol to GP ➢ Theatres are to be informed of MRSA positive patient surgery date
	Emergency Surgical Patients ➢ Current patients will be managed in accordance with the UHBristol MRSA Care Pathway (adults) ➢ For patients who have been discharged and are not currently receiving ongoing hospital care it is the responsibility of the clinical team to inform the patient and/or the patients General Practitioner and to ensure the result is recorded in an appropriate place

3.2 Adult Medical Patients

Timing of screens	**Elective medical patients** ➢ Patients admitted for elective medical procedures (e.g. Cystic Fibrosis patients; gastrointestinal patients) are to be screened on admission.
	Emergency Medical patients ➢ Patients will be screened on decision to admit in the Emergency Department or in the Medical Admissions Unit. ➢ Where patients are admitted directly to wards (e.g. Ward 17 or to isolation cubicles) a screen will be taken within 24 hours of admission ➢ Patients admitted to Ward 11
Results checking	**Primary responsibility for checking results and informing patients is with the Clinical Team Nurses/Doctors** ➢ The Infection Control Nurses will contact the current/most recent ward/department where a patient is located when they become aware of a new MRSA positive patient ➢ A monthly report of all MRSA positive patients will be produced by the Infection Control Team and sent to the relevant Matron/Head of Nursing for cross checking of results
Positive results	➢ Current patients will be managed in accordance with the UHBristol MRSA Care Pathway (adults) For patients who have been discharged and are not currently receiving ongoing hospital care it is the responsibility of the clinical team to inform the patient and/or the patients General Practitioner and to ensure the result is recorded in an appropriate place

3.3 Womens' Services

Timing of screens	**Maternity patients** ➢ All transfers from other hospitals will be screened on admission ➢ All women with/or likely to have babies admitted to the Neonatal Intensive Care Unit are to be screened on admission ➢ Women booked for surgery will be screened at the section clerking clinic in antenatal clinic ➢ Emergency caesarean section patients will be offered screening and the screen will be performed within 24 hours of decision to operate ➢ All women who use intravenous recreational drugs will be screened at first face-to-face contact with Midwifery/Obstetric services and at 36 weeks of gestation ➢ Women with a previous history of MRSA will be screened on any inpatient admission and at 36 weeks of gestation

	Gynaecology patients ➢ Gynaecology major cases will be screened in pre-operative assessment ➢ Gynaecology minor cases will be screened in outpatient clinic at point of decision to admit ➢ Urgent referrals from Early Pregnancy Clinic will be screened at the point of decision to admit ➢ Admissions booked via Pregnancy Advisory Clinic will be assessed for risk of MRSA at point of booking and will be screened at this clinic if they are within a risk group
Results checking	**Primary responsibility for checking results and informing patients is with the Clinical Team Nurses/Midwives/Doctors** ➢ If swab taken in antenatal period swab result should be checked at next visit/admission ➢ On admission for caesarean section. A positive result will not delay surgery ➢ In cases where women are transferred, or baby is on NICU swab result to be checked on post natal ward ➢ Pre-assessment and gynaecology clinic will be responsible for checking results of screens taken ➢ Screens taken at Pregnancy Advisory Clinic and Early Pregnancy Clinic will be checked with other results prior to admission ➢ The Infection Control Nurses will contact the current/most recent ward/department where a patient is located when they become aware of a new MRSA positive patient ➢ A monthly report of all MRSA positive patients will be produced by the Infection Control Team and sent to the relevant Matron/Head of Nursing for cross checking of results
Positive results	➢ If result is positive following delivery inform the ward and NICU (if baby on NICU) of the positive maternal result ➢ Mother can visit baby on NICU. Mother should ensure good personal hygiene, clean hands and wear clean clothing. She should not have contact with other babies on NICU ➢ Mother will be treated. Baby will only be treated if there is a clinical need ➢ On ward, if mother is MRSA positive, mother and baby will need to be in a single room. Whenever possible the baby needs to stay with its mother in the room. If there is a need for the baby to go to the mother and baby room then the baby will have to be nursed with apron and gloves. ➢ If the result is obtained after mother and baby are discharged the result will need to be conveyed to the community midwife. The GP will need to be informed and decide whether to treat.

3.4 Bristol Haematology and Oncology Centre

Timing of screens	➢ All in-patient admissions to ward 61 and ward 62 will be screened on arrival ➢ All patients undergoing treatment on ward 62 will be on admission to the programme and at every 6th attendance

	➢ All patients undergoing treatment in Chemotherapy Day Unit will be screened on admission to the programme and at a regular interval whilst on the programme ➢ All patient remaining as in-patients for long periods will be screened every 30 days
Results checking	**Primary responsibility for checking results and informing patients is with the Clinical Team Nurses/Doctors** ➢ The Infection Control Nurses will contact the current/most recent ward/department where a patient is located when they become aware of a new MRSA positive patient ➢ A monthly report of all MRSA positive patients will be produced by the Infection Control Team and sent to the relevant Matron/Head of Nursing for cross checking of results
Positive results	➢ Current patients will be managed in accordance with the UHBristol MRSA Care Pathway (adults) ➢ For patients who have been discharged and are not currently receiving ongoing hospital care it is the responsibility of the clinical team to inform the patient and/or the patients General Practitioner and to ensure the result is recorded in an appropriate place

3.5 Bristol Royal Hospital for Children

Timing of screens	**Elective surgical patients** ➢ The surgeon responsible for care will take the decision as to whether the child or surgery is within a risk group. The following are considered to risk groups: o Cardiac surgery o Orthopaedic surgery o Vascular surgery o Neurological surgery o Any other implant surgery o Children who have received regular in-patient care o Children who have been in-patients within the last six months o Children who have long term invasive devices
	Renal patients ➢ All children transferred into the renal unit from other hospitals will be screened on admission ➢ Patients for deceased donor transplant will be screened on arrival to the ward ➢ Planned admissions for living donor transplantation or for dialysis access procedures will be screened between two and four weeks prior to the procedure ➢ Patients on dialysis will be screened three monthly
	Bone Marrow Transplantation ➢ All patients will be screened on admission to the Unit ➢ Patients will be screened monthly whilst they remain as inpatients ➢ Patients will be screened monthly whilst receiving active day case treatment

	Baby/child starting home ventilation ➢ Screen to be taken at point of decision for home ventilation ➢ If baby/child remains an inpatient the above procedures for ongoing screening are to be followed
Results checking	**Primary responsibility for checking results and informing patients is with the Clinical Team Nurses/Doctors** ➢ The Infection Control Nurses will contact the current/most recent ward/department where a patient is located when they become aware of a new MRSA positive patient ➢ A monthly report of all MRSA positive patients will be produced by the Infection Control Team and sent to the relevant Matron/Head of Nursing for cross checking of results
Positive results	➢ Current in-patients will be managed in accordance with the relevant Adult or Child MRSA Care Pathway ➢ For patients who have been discharged and are not currently receiving ongoing hospital care it is the responsibility of the clinical team to inform the patient and/or the patients General Practitioner and to ensure the result is recorded in an appropriate place **Elective surgical patients** ➢ The admitting surgeon is responsible for ensuring the child receives appropriate decolonisation/suppression therapy prior to surgery ➢ Decolonisation/suppression therapy will be dispensed either via pharmacy or will be arranged via the child's General Practitioner ➢ Decolonisation/suppression therapy should be timed to ensure surgery is performed on Day 5 of treatment ➢ Theatres are to be informed of MRSA positive patients surgery date

3.6 Intensive Care/High Dependency areas (Adult ITU/HDU; Cardiac ITU/HDU; Paediatric ITU; Neonatal ITU; Respiratory High Care [Ward 10A]; Hepatology High Care [Ward 11 bleed beds])

Timing of screens	➢ Elective surgical patients will be screened as per the relevant protocol above ➢ All other admissions will be screened on admission to the Unit ➢ A weekly screen of all patients on each Unit will also be undertaken
Results checking	**Primary responsibility for checking results and informing patients is with the Clinical Team Nurses/Doctors** ➢ The Infection Control Nurses will contact the current/most recent ward/department where a patient is located when they become aware of a new MRSA positive patient ➢ A monthly report of all MRSA positive patients will be produced by the Infection Control Team and sent to the relevant Matron/Head of Nursing for cross checking of results
Positive results	➢ Patients will be managed in accordance with the relevant

	Adult or Child MRSA Care Pathway ➢ Patients will be isolated in a single room unless otherwise agreed with the Infection Control Team ➢ For patients who have been discharged and are not currently receiving ongoing hospital care it is the responsibility of the clinical team to inform the patient and/or the patients General Practitioner and to ensure the result is recorded in an appropriate place

4. GOVERNANCE AND ASSURANCE

Compliance with the screening policy will be monitored at both local and Trust-wide level.

- A correlation of the number of MRSA screens processed by the Microbiology Laboratory and the number of relevant elective admissions will be undertaken by the Performance Information Team monthly. These results will be reviewed by the Trust Operational Group and will be reported to the Trust Board, the Commissioning Primary Care Trust on a monthly basis and to Monitor as required.

- The percentage of patients who underwent an MRSA screen (for elective and emergency cases) by Ward/Department on day of admission or day subsequent to admission will be collated on a monthly basis by the Performance Information Team. These results will be reviewed by Divisions quarterly.

- An observational audit of compliance to screening of elective patients will be undertaken a minimum of quarterly by the Divisions. The minimum requirements for this audit are either:
    - All cases through a pre-operative assessment clinic in a given day
    or
    - A minimum of 10 patients in an individual ward or department

  These results will be reviewed by the Infection Control Committee and will be reported to Trust Board as appropriate (minimum of inclusion in Annual Report).

- An observational audit of compliance in other areas will be undertaken at least annually as part of the infection control audit programme. These results will be reviewed by the Infection Control Committee and will be reported to Trust Board as appropriate (minimum of inclusion in Annual Report).

5. References and Bibliography

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Appendix 1 **UBHT MRSA Screening leaflet for patients/carers**

University Hospitals Bristol NHS
NHS Foundation Trust

Patient Information Service

Information for patients being screened for MRSA

Patient Information is supported by
ABOVE & BEYOND CHARITIES
Enhancing healthcare in Bristol

March 2009

Hospital Switchboard: 0117 923 0000
Minicom: 0117 934 9869
www.uhbristol.nhs.uk

For an Interpreter or Signer please contact the telephone number on your appointment letter.

For this leaflet in Large Print, Braille, Audio, or Email, please call the Patient Information Service: 0117 342 3728 / 3725

 March 2009 PATHOLOGY/MRSASCREENING/Mar09

What is MRSA?

MRSA stands for **Meticillin-resistant Staphylococcus aureus**.

Staphylococcus aureus is a common germ found in the nose and on the skin of healthy people and usually causes no harm. Around 1 in 3 of people carry the germ and most people would not know that they had it. It can cause boils and abscesses, which are easily treated.

MRSA is a type of **Staphylococcus aureus**, which is resistant to meticillin (a type of penicillin). It is also resistant to some of the antibiotics commonly used to treat these infections. However, there are still some antibiotics available to treat MRSA. Like **Staphylococcus aureus** most people with MRSA would not know if they were carrying it.

MRSA was first identified in hospital but it also affects people in nursing and residential homes and in the general community. It tends to cause most problems for vulnerable and sick people in hospital. As older people are more often in hospital they are more likely to be affected. Ethnic origin and gender make no difference.

How can I find out more about MRSA?

- Discuss with the staff who take your nose swab or who are caring for you.
- Read the UBHT leaflet: 'MRSA Your Questions Answered'.
- Access the NHS Direct website and you can find information about MRSA www.nhsdirect.nhs.uk
- Access the Health Protection Agency leaflet 'MRSA - Information for patients in hospital'.

  Available from the Health Protection Agency website www.hpa.org.uk

The UH Bristol Infection Control Team
Bristol Royal Infirmary

0117 342 3868
Bleep 3543

Will it affect my hospital care?

If you are carrying MRSA and are admitted to hospital, or are already in hospital we will ensure that special precautions are taken around your bed space (e.g. wearing of gloves and aprons for personal care). This is to keep you and other patients safe. You should have clean bed linen, towel and clothes every day. In some instances we may ask you to be placed in a side room.

How does MRSA spread?

MRSA is mainly spread via hands which is why we ask all patients, staff and visitors to wash their hands or use the alcohol gel. It can also be spread by contaminated equipment or surfaces.

Why am I being screened?

All hospitals are working to reduce their infection rates, including MRSA. As part of this the Department of Health have advised NHS Trusts to increase their level of MRSA screening. If we can find out who is carrying MRSA before they come into hospital, or as early as possible during their admission then we can treat them to prevent their MRSA developing into an infection or spreading to other people.

How will I be screened?

We use a swab like a cotton wool bud and take a sample from the inside of your nose. This is painless. The swab is sent to the laboratory and the results are usually available after 2 days. Please ask the person taking your swab how you will get the results. We will contact you only if you are found to be carrying MRSA.

Staff want to take swabs from different sites – why?

If people have wounds or certain skin conditions we will usually ask if we can take swabs from these areas as well as the nose. Sometimes we will ask for a specimen of urine if someone has a urinary catheter, or a specimen of sputum if you have a chesty cough, or a swab from around any device that goes into the skin.

Can I refuse to have MRSA swabs taken?

Yes. But if you are carrying MRSA and we are able to treat you before you have an operation or another procedure, it is likely that you will make a better recovery and reduce the chances of other patients becoming infected with MRSA.

Obviously we can only help address MRSA infections if people consent to be screened and we do hope that you will agree with the request for a nose swab, and possibly other swabs, to be taken.

What happens if I have had MRSA before?

This should be written in your notes but it is important that you inform a member of staff as soon as possible. We will take swabs as previously described.

What happens if my swabs show that I have MRSA?

I had a swab taken at pre-operative assessment and I'm waiting to come in:

If your nose swab indicates that you have MRSA (are positive to MRSA), you will be contacted at home and prescribed an antibiotic cream for your nose and an antiseptic body wash. These are simple to apply and should be applied for five days. You can collect this treatment from the hospital or ask your GP. Full instructions will be provided.

If you are found to be carrying MRSA try not to worry. It is only a risk to others if they are expecting to have an operation in the near future. Every effort will be made to ensure that any operation or procedure is not delayed because of a positive result. If there is a delay it is for your safety.

I'm in hospital:

A member of staff will inform you of the result and treatments will be prescribed for you. If you have any questions discuss them with the staff and ask for the UBHT leaflet, MRSA 'Your Questions Answered'.

I'm pregnant /have just had a baby:

If you are positive to MRSA and you are about to have a baby, or have just had one, you are likely to be very worried about passing MRSA on to the baby. It is possible that the MRSA will be transferred to the baby's skin but with good hygiene, thorough hand washing, care changing nappies/ clothes and using the treatment prescribed for you, it is unlikely that the baby will develop an MRSA infection. It is important to keep close contact with your baby for his/ her development.

Appendix 2

Procedures for an MRSA screen

Sampling sites

	Nose (L&R)	Groin (L& R)	Unhealed/Infected Wounds	Skin lesions	Umbilicus (neonates)	Urine if catheterised	Sputum if productive cough	Peg/Stoma site if signs of infection	Line sites that have signs of infection	Dialysis line sites (where appropriate)
Paediatric emergency admissions **not known** to be MRSA positive	√				√					
Paediatric emergency patients **known** to be MRSA positive	√	√	√	√	√	√	√	√	√	√
Paediatric patients Critical Care areas (PICU, NICU, BMT, Renal) admission, weekly and clearance screens	√	√	√	√	√	√	√	√	√	√
Paediatric patients in hospital more than 30 days	√					√				
Paediatric patients MRSA positive clearance screens	√	√	√	√	√	√	√	√	√	√
Paediatric patients on home ventilation on admission to hospital	√	√	√	√	√	√	√	√	√	√
Paediatric renal patients monthly screening	√	√								√
Adult emergency admissions **not known** to be MRSA positive	√									
Adult emergency admissions **known** to be MRSA positive	√	√	√	√		√	√	√	√	
Adult elective admissions	√									
Adult patients Critical Care Areas admission, weekly and clearance screens	√	√	√	√		√	√	√	√	√
Adult patients in hospital more than 30 days	√					√				
Adult patients MRSA positive clearance screens	√	√	√	√		√	√	√	√	√

Procedure for obtaining samples

- Explain rationale to carer/patient
- Provide them with UHBristol Patient Information Leaflet: ‘Information for patients being screened for MRSA’ available on the Document Management System (DMS).

- Complete the specimen forms accurately - include details of any relevant clinical information and any current antibiotic treatment
- Document/date what has been done in the patient's notes/care pathway
- Ensure that someone is designated to check the results on VPLS after two days and then act on any positive results – topical treatment started promptly, patient placed on MRSA Care Pathway (there is one for Paeds & Neonates, and one for Adults – both on DMS).

Screening specifics:

- **Nose:** Using sterile saline moistened swab obtain sample from both anterior nares and send for MC&S (Microscopy, culture and sensitivities) MRSA screen; you can use one swab to do both nares.
- **Groin:** Using sterile saline moistened swab obtain sample from right and left groin area. You can use one swab to do both sides.
- **Umbilicus:** Using sterile saline moistened swab obtain sample from base of umbilical stump.
- **IV Cannulae/Central lines/Dialysis lines/PEG/Stoma/Wound sites:** Do not remove dressings if there are no clinical signs of infection