

## Management and Care of Patients with Meticillin resistant *Staphylococcus aureus* (MRSA) and MRSA Screening Programme

### Policy No: IC 007

<b>This policy should be read in conjunction with the following policies which can be found in the Infection Control Manual or on the BSUH intranet:</b>	<b>Progress and date of approval (Approved/ Under Review)</b>
IC 001 - Organisational Framework for Infection Prevention and Control	<b>September 2009</b>
IC 002 Standard (Universal) Precautions	<b>Under review</b>
IC 003 Hand Hygiene	<b>July 2009</b>
IC 004 Isolation Nursing	<b>October 2009</b>
IC 010 Managing patients with highly transmissible or epidemiological important micro-organisms	<b>December 2009</b>
IC 020 Specimen collection for Microbiological Analysis	<b>Under review</b>
IC 022 Decontamination	<b>August 2009 (V3)</b>
TCP CO 113 Aseptic No-Touch Technique (ANTT)	<b>March 2009</b>
HR 17 Dress Code Policy	<b>January 2010</b>
RM 27 Waste Management Policy Version 2	<b>November 2008</b>
RM 31 Prevention of Sharps Injury and Body Fluid contamination policy	<b>May 2009</b>
TCP O907 (TPC 203) Adult Patient Transfer Policy	<b>September 2009</b>
Visitors code summary leaflet	<b>July 2008</b>

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**Signed by Chair of Committee:**



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### Consultation and Ratification Schedule

Name of Committee	Date of Committee
Hospital Infection Prevention and Control Committee (HIPaCC)	June 2010
DIPC	June 2010

Name of Person/Team	Date
Infection Control Team	March 2010
Chief Nurse, Associated Directors of Nursing and Midwifery, Matrons	February 2010
Hospital Infection Prevention and Control Committee members	April 2010
Paediatric Consultant	February 2010
Director of Facilities	March 2010
Director of Operations	February 2010
Microbiology Department	October 2008

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## 1. Policy Statement

The aim of this policy is twofold:

- 1.1 To provide staff at BSUH with information needed to manage patients with MRSA colonisation and / or infection.
- 1.2 To inform staff of the key elements that must be implemented to deliver an effective MRSA screening programme.

## 2. Key Principles

- 2.1 Reducing HCAI's is a core standard in the Code of Practice for Prevention and Control of Healthcare Associated Infections (2008) Health Act. It is therefore a key organisational priority for BSUH.
- 2.2 Infection Control is the responsibility of all staff associated with the delivery of patient care.
- 2.3 Instances when it is perceived that the policy cannot be followed must be discussed immediately with the Infection Control Team (ICT). The ICT will advise on any contingencies or alternatives that should be implemented.
- 2.4 The clinical need and safety of the patient is our priority. The MRSA status of the patient must not influence the quality of care.
- 2.5 Staffing levels must be maximised. Regular and senior staff should be deployed to high risk/co-horted areas. If agency/bank staff are employed, BSUH senior staff must emphasise the importance of Infection Control procedures at the beginning of the period of duty.

## 3. Purpose

- 3.1 To set high standards of patient care and safety when managing patients with MRSA colonisation / infection.
- 3.2 Reduce the risks of the transmission of MRSA to patients (visitors, staff, contractors) when in the BSUH clinical facilities.

## 4. Scope

- 4.1 This policy is applicable to all areas in BSUH where the delivery patient care occurs.

## **5. Responsibilities**

- 5.1** The Chief Executive and Trust Board have overall responsibility for ensuring that the Trust has the necessary management systems in place enabling effective implementation of the guidance outlined in this policy.
- 5.2** Ensure guidance in this policy is implemented within their Division and clinical teams
- 5.3** Departmental and line managers are to ensure staff have access to the policy and that the policy is implemented.
- 5.4** All employees within BSUH including temporary and contract staff will be responsible for:
  - 5.4.1** Implementation of the criteria outlined in this policy.
  - 5.4.2** Informing their manager if an Infection Control risk (or adverse working practise) is identified. Whether as a risk to themselves or others.
  - 5.4.3** Ensuring full compliance with hand hygiene (decontamination) before and after contact with the patient or the 'patient zone'.
- 5.5** Facilities staff are to ensure that high levels of environmental cleanliness are maintained at all times. Ward department managers are responsible for liaising with Facilities to ensure cleaning schedules are implemented and the levels of cleanliness are regularly monitored.
- 5.6** The ICT will be responsible for:
  - 5.6.1** Revising and updating of the policy.
  - 5.6.2** Monitoring the compliance with and effectiveness of the policy through the Organisational Framework for IPC (IC 001) policy and for reporting it's findings to HIPaCC at pre defined committee meetings.
  - 5.6.3** Deliver specialist IPC advice (based on empirical and evidence based practice) in relation to the policy.
  - 5.6.4** Provide training to ensure the successful implementation of the policy.
- 5.7** The HIPaCC has overall responsibility in reviewing all aspects of the guidance outlined in this policy.

## 6. MRSA POLICY

### 6.1 Introduction

*Staphylococcus aureus* (*S. aureus*) is a common bacterium present on the skin and noses in approximately one third of the healthy population. This is generally referred to as 'colonisation' which means that it is carried harmlessly on the skin and does not cause an infection. Colonisation by *S. aureus* is more common than infections caused by *S. aureus* and MRSA. *S. aureus* infections occur in a relatively small proportion of the population. These are treated with conventional antibiotic therapy.

Meticillin Resistant *Staphylococcus aureus* (MRSA) is a resistant strain of *S. aureus*. The treatment of MRSA infections requires the use of a limited and often different type of antibiotics than would be used to treat Meticillin Sensitive *Staphylococcus aureus* (MSSA).

In order to reduce the number of Health-Care Associated (HCAI) MRSA infections strategies and guidance have been published. Targets have been set to reduce MRSA Blood Stream Infections (BSI's) (Department of Health, 2005).

A collaborative approach using a number of interventions and practises (particularly Standard / universal precautions) are required to reduce the risks associated with the transmission of infections. There is no single /standalone intervention that can be implemented to achieve this aim. This policy advises on the correct application of the interventions that should be implemented.

Standard (Universal) precautions including hand hygiene, the use of Personal Protective Equipment (PPE), linen and clinical waste disposal, standards of environmental cleanliness all contribute to effective IPC practises. Additional actions such as the appropriate and timely isolation of patients with MRSA, informed inter - ward transfers (of MRSA positive patients) and the monitoring of the effectiveness of and compliance with policy all contribute to the overall aim of reducing the risks of cross-infection.

## 7. Minimising the Spread of MRSA at BSUH

### 7.1 Identification of MRSA Positive Patients

The Infection, Prevention and Control Nurses (IPCNs) monitor and keep records of patients who are found to be MRSA positive. The IPCN's add the alert symbol – the 'red diamond' on the patient records (PAS) on discovering a MRSA positive result.

- 7.1.1 All new MRSA positive patients' results are communicated to the relevant clinical areas daily, by telephone. MRSA notifications are also circulated to ward managers, matrons and Associate Directors of Nursing (ADN's) by daily e mails.

- 7.1.2 Ward staff own the responsibility to both inform the patient of a positive MRSA result and to record this information in the nursing notes. They should also provide the patient with information leaflets on MRSA.
- 7.1.3 If the new MRSA positive patient is discharged home, the IPCN relays the result to the GP practice. This information is then cascaded to the patient by the practice staff.
- 7.1.4 When a new MRSA positive patient has been transferred to another healthcare facility (HCF), the IPCN notifies the receiving department / HCF of the result. This is documented on the PAS system and on the ICT's MRSA database.
- 7.1.5 The IPCN advises on the appropriate suppression therapy and isolation of MRSA patients when the results are communicated. It is the responsibility of the ward staff to ensure advice is followed.

## 7.2 Identification of Patients who are MRSA Positive from Electronic / Medical Records

Patients with a history of MRSA are identified in the following way:

- 7.2.1 Patients notes displaying the generic 'red diamond'  on the 'Oasis' (Patient Administration System [PAS]) may indicate a positive MRSA status). **[Note: Other safety warnings also use this identifier].**
- 7.2.1 'Clicking' on the 'red diamond' will identify if the patient has a history of MRSA. Staff should check entries under this symbol for each patient.
- 7.2.2 Ward clerks should check all inpatient admission records on PAS looking for the 'red diamond'. Upon identifying a history of MRSA, the ward clerks should notify the ward manager of this finding.
- 7.2.3 Should MRSA colonisation be suspected, ward staff should review the patient's previous microbiology results for any history of MRSA.

## 7.3 Identification of Patients who are MRSA Positive from the Medical and Nursing records

- 7.3.1 All new MRSA positive patients are followed up by the ICT. A MRSA sticker is applied to the inside front cover of the patient's notes. This applies to newly diagnosed MRSA positive patient's since July 2009 when this system was initiated.

## **7.4 Source Isolation (Barrier Nursing) Precautions**

It is the responsibility of the nursing staff in conjunction with Site Management to ensure timely isolation and barrier nursing precautions are implemented.

The patient **MUST** be informed for the reason for the barrier nursing precautions.

### **7.4.1 Single-Rooms**

MRSA positive patients are to be source isolated in a single room. Priority must be given to MRSA patients with exfoliating skin conditions, large open wounds, MRSA in the sputum of a patient with a tracheostomy or productive cough. [See Appendix 1-Single Room Source (Barrier Nursing) Isolation Precautions].

### **7.4.2 Open Bay Barrier (Standard) Nursing Precautions**

In the absence of an available side-room, the patient with MRSA may be nursed in the main bay but full Standard infection control precautions must be maintained. Whenever possible, the patient should be nursed in the bed nearest to a sink. When possible they should not be nursed adjacent to patients with wounds or indwelling devices. [See Appendix 2 - Open Bay Source Isolation (Barrier Nursing) Precautions].

### **7.4.3 Cohort Nursing**

If there are a number of patients of the same sex who are MRSA positive, they may be nursed in a dedicated bay or area. See Appendix 3 Cohort Nursing.

### **7.4.4 Isolation of MRSA positive patients on Twineham (orthopaedics) ward**

The placement of patients will depend on the number of patients with MRSA and whether they are infected or colonised with the MRSA.

MRSA infected patients are to be given priority to the 'end' side rooms, if they are not available they are to be nursed in the 'end bay' using full barrier nursing precautions outlined in appendix 2. The separate sluice is to be utilised.

Patient's who have discharging wounds with pathogens (other infections that are not MRSA) should be nursed in the side rooms located at the far end of the ward. Should the side rooms be unavailable, the patient's should be nursed in the 'second bay' using full source isolation precautions [Appendix 2].

MRSA 'colonised' patients may be barrier nursed in the remaining side rooms, or if there are several MRSA colonised patients they may be cared

for in a dedicated bay separate from other patients with infected wounds or non MRSA positive patients. See appendix 3 for procedure.

#### **7.4.5 Visitors**

Generally patients with MRSA may receive visitors. Visitors should decontaminate their hands with alcohol hand gel when entering and leaving the isolation area. The use of gloves and aprons may be appropriate if the visitor is assisting with care.

Visitors must not handle any patient's wounds/lines etc.

Visitors are to receive a copy of the visitor's code and information of MRSA.

### **7.5 Aseptic Non - Touch Technique / Wound Care**

Aseptic non-touch technique (ANTT) is the method used to prevent contamination and potential infections to wounds, indwelling devices and other susceptible sites in the patient.

A high standard of ANTT is advised in the following procedures (Wilson, 2006) to minimise MRSA (and other) infections in patient's who are colonised with MRSA:

- When inserting intravascular devices and urinary catheters.
- When preparing and administering Intravenous drugs and fluids.
- When dealing with acute wounds healing by primary intention (before surface skin has healed).
- During medically invasive procedures.
- During vaginal examination during labour.

[See ANTT policy TCP CO 113]

### **7.6 Environmental Cleanliness in Source Isolation Rooms and MRSA Cohorting Bays**

#### **7.6.1 Standard Cleaning**

A high standard of cleaning should be carried out daily using a chlorine releasing solution (Chlorclean/Tristel). Dust must be removed from horizontal surfaces, corners and ledges.

Mattresses and bed-frames must be cleaned thoroughly daily and when there are visible signs of contamination (Decontamination IC 022). Decontamination labels should be applied on completion of cleaning.

The patient's bed area must be free of clutter to allow effective cleaning practises to be undertaken.

### **7.6.2 Terminal Cleaning**

A 'terminal' clean is required when the patient is transferred from the isolation facility or Bay (where isolation occurred) or when a cohorted area has been disbanded.

Prior to terminal cleaning, nursing staff should place all disposable items into the clinical waste stream.

Linen curtains should be sent via the 'infectious' stream for laundering. Disposable curtains should be replaced with new.

Electric therapy mattresses must be cleaned, bagged up and labelled 'infected' ready for prompt collection by the company that provides the equipment.

The Nurse in Charge is responsible for contacting the Domestic Supervisor to arrange terminal cleaning. Patient line must be contacted to clean their equipment.

### **7.6.3 Linen**

All linen should be treated as potentially 'infectious' and disposed of in red alginate linen bags according to IC 002 Standard (Universal) Precautions.

### **7.6.4 Waste**

Clinical waste should be disposed of as infectious. [See BSUH Policy RM 27 Waste Management policy].

### **7.6.5 Decontamination of patient equipment**

Patient equipment should be dedicated to the patient with MRSA and not shared with other patients.

Equipment that is shared with other patients should be decontaminated appropriately in between (different) patient uses. Detergent wipes should be used and the surfaces dried thoroughly. Medical devices must be decontaminated according to the manufacturer's instructions (Decontamination IC 022).

Where possible disposable items are recommended.

## **7.7 Discharging and Transferring MRSA Patients**

The transfer of MRSA positive patients (whether colonised or infected) to other wards should be discouraged. However, patient safety (and clinical need) should not be compromised and transfer may need to occur (for specialist care / investigations).

- 7.7.1** The MRSA status should not impede discharge. Relevant information on MRSA should be given to the patient (and their relatives) prior to discharge. If the patient is returning home where friends and relatives are unwell the ICT can offer further advice. The patient should resume normal hygiene measures.
- 7.7.2** Routinely, there are no requirements for patients colonised with MRSA to continue their suppression therapy after discharge unless re-admission is anticipated / planned (e.g. a planned invasive procedure).
- 7.7.3** The GP and others delivering the patient's care should be informed of the patient's MRSA status.
- 7.7.4** If the patient is transferred either inter-ward or externally (to another healthcare facility) the receiving staff must be notified (in advance - where results are available) of the patient's MRSA status. This dissemination of medical information is the responsibility of the nurse discharging / transferring the patient. It must also be documented in the nursing notes and patient transfer check list.
- 7.7.5** Screening prior to discharge is not routine. Other healthcare facilities may request that the patient be re-screened prior to transfer. To prevent any delay in discharge repeat screens should be taken as soon as possible. A positive MRSA result must not deter a planned discharge or transfer to another healthcare facility where ongoing care is required.

## **7.8 Transporting / Portering**

### **7.8.1 Transportation**

Patients being transported must have any lesions covered and they are to have clean clothing and covered with a clean blanket.

Porters / ambulance crew are to be informed (without compromising confidentiality) that the patient has been in isolation.

Trolleys, wheelchairs and other surfaces that have come into contact with an MRSA positive patient must be cleaned in accordance with Decontamination (IC 022) Policy.

### **7.8.2 Portering Staff**

Portering staff need not wear gloves and aprons unless they intend to make direct contact with the patient or patient's environment during the transfer process.

Following direct contact episodes with the patient gloves and aprons should be removed and disposed of as clinical waste inside the room or in the immediate bay/ward area.

Hands must then be cleaned with alcohol hand gel or washed with liquid soap and water and dried thoroughly.

## **7.9 Last offices**

The Infection Control precautions for handling deceased patients are the same as those used in life. There is negligible risk to mortuary staff or undertakers provided that Standard Infection Control Precautions are employed.

- 7.9.1** Lesions should be covered with impermeable dressings.
- 7.9.2** Disposable PPE should be disposed of as clinical waste inside the side-room.
- 7.9.3** Staff hands should be washed with soap and water, and dried thoroughly.
- 7.9.4** The patient's bed linen should be disposed of as infected linen (Standard (Universal) Precautions IC 002 policy).
- 7.9.5** An MRSA positive cadaver is not an indication for the use plastic body bags. Should there be a risk of exposure to blood or bodily fluids one must be used.

## **8. MRSA SCREENING PROGRAMME**

## 8.1 Introduction

The 2008/09 and subsequent 2009/10 Operating Framework introducing MRSA screening of patients requires NHS Acute Hospitals to:

All elective admissions must receive screening for MRSA (effective from Apr 2009). This must be extended to include all emergency admissions as soon as possible (and be implemented by 2011); DoH. The purpose of screening is to identify MRSA carriage and implement suppression therapy. This will reduce the risk of infection to colonised patients and reduce the risk of transmission of MRSA to other patients.

DoH (2008/9 & 2009/2010). NHS Operating Framework.

The purpose of screening is to identify patients who may be carrying the micro organism – MRSA. This is known as ‘colonisation,’ which means a person may carry MRSA but not have developed infection. MRSA is living on the skin and causes no harm unless it has the opportunity to enter ‘into’ the body e.g. as a result of surgery or through invasive devices.

A positive screen triggers the process of ‘suppression’ therapy. This will reduce the amount of MRSA bacteria that the person is carrying on their skin or in their nose. It may not completely remove the bacteria. Reducing the amount of bacteria will reduce the risks of the colonised person developing infection and reduce the risk of transmission of MRSA to other patients.

The MRSA screen should be documented in the nursing care plan and on the daily ward handover sheet.

The results should be available in 3 working days, and it is worth noting that not all the results of the MRSA screen will be available at the same time therefore please ensure all results have been reviewed before declaring a patient’s MRSA status.

### 8.1.1 Elective Admissions

All elective admissions must be screened, preferably in pre-admission clinics, a minimum of two weeks prior to admission allowing for test results to confirm if MRSA is identified and to initiate appropriate suppression therapy.

#### Patients with previous history of MRSA

Patients with a history of MRSA are considered MRSA negative when three (negative) screens have been taken, at least one month apart. The patient must not have additional risk factors i.e. In-dwelling devices, skin lesions, and respiratory tract abnormalities for 12 months (Coia et al, 2006).

Negative MRSA screening results remain valid for a period of 3 months unless the following occur:

- New changes in the patient's clinical condition, such as the development of pressure sores or wounds.
- The insertion of invasive devices.
- The patient has recently been an inpatient in BSUH or any other healthcare facility, nursing home etc.
- The patient is has been in contact with a known MRSA positive person / patient.
- The 'patient' is a healthcare worker.

In these circumstances the patient must have a repeat screen undertaken pre-procedure.

Exemptions to the Elective MRSA screening programme as specified by the *Department of Health (2008)* Guidance are:

- Day case ophthalmology (Adult and Children)
- Day case dental (Adult and Children)
- Day case endoscopy (Adult and Children)
- Minor dermatology procedures e.g. warts, or other liquid nitrogen applications
- Children / Paediatrics unless in a 'high risk group'
- Maternity / Obstetrics except for elective caesareans and any high risk cases, e.g. high risk of complications in the mother and/or potential complications of the baby ) e.g. likely to need SCBU, NICU.

'**High risk groups**' are those patients with high predisposing risk of MRSA carriage. The list is based upon the '*Joint working party on MRSA*', (2006), and are listed below:

- Patients with frequent / multiple hospital admissions.
- Patients transferred from other healthcare establishments UK and overseas.
- Patients from residential care facilities.
- Patients who are receiving nursing care from care agencies in their own homes.
- Patients with a known history of MRSA.
- Patients with chronic wounds / open lesions (locally agreed)
- Patients with indwelling devices. (locally agreed)
- Patients transferred from ITU.

### 8.1.2 Emergency Admissions

All emergency and other 'non elective' admissions must be screened within two hours of their admission into hospital.

The Divisions are responsible for putting in place systems that will identify all patients who meet the criteria for screening.

### **8.1.3 Staff Screening**

Routine screening of staff is not undertaken.

## **8.2 MRSA Screening Pathways**

The following table identifies patient groups (elective and non elective) included in the MRSA screening programme.

Those patients that have been identified as MRSA positive and are receiving MRSA suppression therapy do not require a repeat MRSA screen.

Patient Group	Screen Required	When/Where	Repeat Screen
Adult ICU	Yes	On admission/transfer in & on transfer out (wards /externally) or discharge	Yes. Screen MRSA negative patients every Monday.
Breast Surgery	Yes	Pre-assessment	Yes. Weekly for patients who are 'high risk' or if their inpatient episode is extended.
Cardiac Surgery – Elective	Yes	Pre-assessment	Yes. Screen MRSA negative patients every Sunday if they have been an inpatient for more than 7 days.
Cardiac Surgery – Emergency	Yes	On admission (including intra ward transfers)	Yes. Screen MRSA negative patients every Sunday if they have been an inpatient for more than 7 days.
Cardiology – Elective	Yes	Pre-assessment	Yes. Screen MRSA negative patients weekly if they have been an inpatient for more than 7 days.
Cardiology – Emergency	Yes	On admission (including intra ward transfers)	Yes. Screen MRSA negative patients weekly if they have been an inpatient for more than 7 days.
Cardiology – Elective Interventional Procedures	Yes	Pre-assessment OPD/Clinic	Yes. Screen MRSA negative patients weekly if they have been an inpatient for more than 7 days.
Cardiology – Emergency Interventional Procedures	Yes	On admission (including intra ward transfers)	Yes. Screen MRSA negative patients weekly if they have been an inpatient for more than 7 days.
Care of the Elderly admissions RSCH and PRH	Yes	On admission to AMU. Receiving ward to check if screened. If not the ward to screen	Not routinely
Chemotherapy Outpatients	Yes	New patients at OPD or at Information Session pre treatment	Yes. Every 6 months or if there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device)
Chemotherapy – <b>New Emergency Patients</b>	Yes	Pre-treatment	Yes. Every 6 months or if there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device)
Chemotherapy & Radiotherapy – <b>Elective Inpatients</b> (Howard One)	Yes	New patients OPD pre-treatment	Yes. Every 6 months or if there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device).
Chemotherapy & Radiotherapy <b>Inter-ward transfers</b> to Howard One	Yes	On admission to ward	Yes. Every 6 months or if there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device).

Patient Group	Screen Required	When/Where	Repeat Screen
Day Surgery	Yes	Pre-assessment Unit Day Surgery, LVH	Not routinely.
Dermatology	Dermatology clinic will screen all patients being admitted for skin flaps or other significant day case surgery. Patients also to be screened if they fall in the high risk patient group category.		
Digestive Diseases – Elective	Yes	Pre-assessment Unit	Yes. Screen MRSA negative patients every Tuesday unless they have received an admission screen Monday.
Digestive Diseases – Emergency	Yes	On admission	Yes. Screen MRSA negative patients every Tuesday. Unless they have received an admission screen Monday.
Ear Nose and Throat	Yes	In pre-assessment	Not routinely.
Endoscopy	Patients screened in pre-assessment. If the patient requires admission to hospital, the ward is to check for the MRSA screen, if no screen found patient to be screened.		
General Surgery – Elective	Yes	Pre-assessment Unit	Weekly for patients who are 'high risk' or if their inpatient episode is extended.
General Surgery – Emergency	Yes	On admission	Weekly for patients who are 'high risk' or if their inpatient episode is extended
General Medical – Emergency	Yes	On admission in MAU and Balcombe ward. The receiving ward to check if screened. If not patient to be screened.	Not routinely
General Medical – Elective	Yes (based upon risk assessment)	On admission if patients convert to overnight stay	Not routinely
Gynaecology – Elective	Yes	Pre-assessment Level 11	Weekly for patients who are 'high risk' or if their inpatient episode is extended.
Gynaecology – Emergency	Yes	On admission	Weekly for patients who are high risk or if they are extended stay admissions
Haematology Day Cases	Yes	Pre-treatment in Haematology Day Unit	Every 6 months or if there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device)
Haematology & Oncology Inter-hospital transfers	Yes	On admission to ward	If there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device)
Interventional Radiology – Vascular Angioplasties	Yes	Pre-assessment	Not routinely

Patient Group	Screen Required	When/Where	Repeat Screen
Neonates	Yes	On admission or transfer into the unit	Weekly. Screen negative babies every Tuesday.
Neurology – Elective Surgery	Yes	Pre-assessment	Weekly for patients who are high risk or if they are extended stay admissions
Neurology – Emergency Surgery	Yes	On admission to the unit	Weekly for patients who are high risk or if they are extended stay admissions
Neurology – Elective Medicine	Yes	Pre-assessment	Not routinely
Neurology – Emergency Medicine	Yes	On admission to the unit	Not routinely
Obstetrics – Antenatal Admissions	Yes (if high risk)	On admission or when seen at 28-32 weeks. (Midwife to check if screened on admission)	Not routinely
Obstetrics – Labour or post natal	Yes (if high risk)	When seen at 28-32 weeks. Check if screened. If not screen women post natal.	Not routinely
Obstetrics – LSCS Elective	Yes	Maternity Day Assessment Unit (women to take own MRSA screen N and P).	Not routinely
Obstetrics – LSCS Emergency	Yes (if high risk)	On admission to Labour ward or Post Natal ward. (Check as may have been screened at 28-32 weeks).	Not routinely
Oncology – requiring Tunnelled CVC lines	Yes	Pre- assessment or Pre-procedure	Every 6 months or if there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device)
Ophthalmology – Day case surgery	The patient requires screening if admitted from a care home or transferred from healthcare facility. Patients also require screening if they have had a previous history of MRSA or have an open wound or lesion.		
Ophthalmology – Overseas Patients	Yes	On admission pre-procedure	Not routinely

Patient Group	Screen Required	When/Where	Repeat Screen
Ophthalmology – Out of area/Private Patients	Yes	SEH staff will arrange with GP	Not routinely
Ophthalmology – Emergency Admissions	Only if the patient is admitted as an inpatient and is not discharged the following day. To also be screened if comes under the high risk patient group category.		
Orthopaedics - Elective	Yes	Pre-assessment Unit	Weekly. Every Tuesday (Albourne ward) SEE BELOW
Orthopaedics - Emergency	Yes	On admission and intra ward transfers.	Weekly. Every Wednesday (Twinehan ward).
Orthopaedics Rehabilitation	Yes	On admission intra ward transfers.	Not routinely, unless change in patients clinical condition.
PEG/RIG insertions	Yes	Pre-procedure	Not routinely.
Paediatric ICU and HDU	Yes	On admission	Weekly. MRSA negative children are to be screened every Monday.
Paediatrics Elective (high risk)	Yes	Pre-assessment Clinic	Not routinely.
Paediatrics Emergency (high risk)	Yes	In CASU, on decision to admit the child.	Weekly for children who are high risk or if they are extended stay admissions.
Radiotherapy – Elective	Yes	Pre-radiotherapy in Radiotherapy	Every 6 months or if there is a change in patient's clinical condition (i.e. tissue breakdown, inflammation of IV device).
Renal - Dialysis Access Procedures (AV fistula/graft, tunnelled CV dialysis Catheter)	Yes	Surgical Assessment Clinic or Dialysis Unit where decision to admit is made	
Renal – Inpatients (inc non-renal outliers)	Yes	On admission (unless receiving MRSA suppression therapy)	Every Wednesday (unless screened on the previous Monday or Tuesday).
Renal – Outpatient Haemodialysis + Satellite)	Yes	Pre-treatment for new patients	Every 6 months
Renal – Peritoneal dialysis	Yes	OPD	Prevalent patients to be screened every 6 months
Vascular Surgery – Elective	Yes	Pre-assessment Unit	Weekly. Every Monday for 'high risk' patients or if extended stay admissions.
Vascular Surgery – Emergency	Yes	On admission	Weekly. Every Monday for high risk patients or if extended stay admissions.

### **8.3 Patient Information**

All patients having an MRSA screen should be given a BSUH patient information leaflet which explains MRSA screening.

### **8.4 Taking an MRSA screen**

See Appendix 4 Specimen Collection for MRSA screening.

### **8.5 Cancellation of surgical or interventional procedures**

Any decision to cancel a surgical/interventional procedure because of the MRSA status will be at the discretion of senior members of the clinical team responsible for the patient's care. The decision to delay surgery must be clearly documented in the patient's notes.

## **9 MRSA Positive Results from Elective Screening**

It is the responsibility of the clinical area to check screening results on Winpath®.

### **9.1 Elective Pre-Admissions**

#### **9.1.1 Hickstead Unit**

- To inform the patient by telephone and contact the GP.
- A letter outlining the MRSA suppression therapy procedure will be sent to the patient, (Appendix 6). They will be asked to collect the prescription from their GP.
- A request will be made to the GP to prescribe the MRSA suppression therapy (Appendix 7).
- The patient's consultant and waiting list manager must also be informed.

#### **9.1.2 Elective Caesarean Sections**

- The ICT to inform the women by telephone and contact the GP.
- The ICT also to inform the midwives (RSCH x 7622, PRH X 5856).
- A letter outlining the MRSA suppression therapy procedure (Chlorhexidine 4% skin cleanser washes only) will be sent to the women and they will be asked to collect the prescription from their GP.
- A request will be made to the GP to prescribe the MRSA suppression therapy (Chlorhexidine 4% skin cleanser washes only).

### **9.1.3 Radiotherapy patients**

- The ICN to inform the radiologist of the positive MRSA result x 4240
- The ICN to inform the GP of the positive result
- A letter outlining the MRSA suppression therapy procedure (Dermol 500 and Mupirocin) will be sent to the patient and they will be asked to collect the prescription from the GP.
- A request will be made to the GP to prescribe the MRSA suppression therapy (Dermol 500 and mupirocin).

### **9.1.4 Lewes Victoria Hospital**

- BSUH ICT to notify the LVH (01273) 402503 and inform staff of result
- Staff at LVH to inform consultant (preferably by e mail)
- ICN / Nurse at LVH is to inform the patient by telephone of the result.
- ICN to contact the GP and send out template letter requesting suppression therapy

### **9.1.5 Elective cardiac surgery**

- ICT to inform cardiac co-ordinator on Ext 8357/4470. They will:
- Inform the consultant
- Inform the GP and send out the template letter requesting suppression therapy is commenced 4 days before planned admission.
- Inform the patient by telephone and advise them that their GP will contact them to advise them of the suppression therapy that is required and organise a prescription for that therapy.

## **10. MRSA Suppression Therapy (See appendix 5).**

- The purpose of the treatment is to reduce the burden of MRSA, reducing risk of transmission and infection.
- The treatment does NOT eradicate carriage of MRSA.
- It is the responsibility of the ward to ensure that the MRSA suppression therapy is prescribed.
- The patient is to be informed of the pending treatment and be given opportunity to discuss the therapy.
- It is advised that mupirocin nasal ointment is limited to two courses over a 12 month period, preferably with a 6 month gap between each treatment, to minimise antimicrobial resistance.
- Currently there is no limit to the frequency of use of the Chlorhexidine 4% skin cleanser washes.
- The re-screening of patients following suppression therapy is NOT indicated

## 10.1 MRSA Suppression Therapy in Adults

- 10.1.1 All MRSA positive patients are to receive a course of MRSA suppression, outlined in Appendix 5.
- 10.1.2 Adults with skin conditions such as eczema or dermatitis, are not to receive Chlorhexidine 4% skin cleanser washes (alternatives are available) but they are to receive Mupirocin nasal ointment. Advice on MRSA suppression therapy in patients with skin conditions should be sought from the ICT.

## 10.2 MRSA Suppression Therapy in Paediatrics

- 10.2.1 MRSA suppression therapy is indicated in children 1 year and over.
- 10.2.2 Children with skin conditions such as eczema/dermatitis, are not to receive chlorhexidine body washes (alternatives are available), but may receive mupirocin nasal ointment.
- 10.2.3 Children with MRSA in their tracheostomy stomas may have local topical treatment (hibitane® cream). This is not routine suppression therapy and its suitability is to be discussed with the ICT.
- 10.2.3 Children under 1 year of age are excluded from MRSA suppression therapy.

## 10.3 MRSA Suppression Therapy in Neonates

- 10.3.1 MRSA positive neonates on TMBU or SCBU **should not** routinely receive MRSA suppression therapy.
- 10.3.2 The consultant caring for the baby may wish to discuss individual cases with the Consultant Microbiologists.

## 10.4 MRSA Suppression Therapy in Elective Admissions

- 10.4.1 MRSA suppression therapy should be timed that any operation/procedure takes place on day 5 of the treatment. Chlorhexidine 4% skin cleanser washes should continue throughout the duration of the patient stay in hospital.
- 10.4.2 If the procedure normally requires antibiotic prophylaxis, an antibiotic with activity against MRSA (usually Vancomycin or Teicoplanin) is to be added to the broad spectrum antibiotic regimen. Further discussion with a pharmacist or microbiologist is advised.

## 10.5 MRSA Suppression Therapy in Adult Intensive Care Units (RSCH, PRH, HWP), Cardiac HDU, CCU and Digestive Disease Unit (Level 9a)

- 10.5.1 Chlorhexidine 4% skin cleanser washes are used routinely for all patients irrespective of the patients MRSA status.

## 10.6 MRSA Suppression Therapy in MRSA Positive Women undergoing Elective Lower Section Caesarean Sections

- 10.6.1 Mupirocin nasal ointment is contraindicated for use in pregnancy.
- 10.6.2 Women being admitted for elective LSCS should begin their suppression therapy using chlorhexidine washes/shampoo to coincide with day 5 being day of the procedure, and continue for the duration of their hospital stay.

## 10.7 MRSA Suppression Therapy in Emergency Surgical and Interventional Procedures where Prosthetic Implant Surgery is Indicated (Orthopaedics, Vascular, Cardiac, and Neurosurgery).

All emergency (non elective admissions) admitted in this category require a MRSA screen. This should be performed before MRSA suppression therapy is commenced.

MRSA suppression therapy should be prescribed as prophylaxis until the screen results are known. Once available the suppression therapy should be completed as follows:

**MRSA Negative** - discontinue nasal Mupirocin but continue Chlorhexidine 4% skin cleanser washes for duration of inpatient stay.

**MRSA positive** - complete the 5 day course of nasal Mupirocin and continue Chlorhexidine 4% skin cleanser washes for duration of inpatient stay. Where the surgical procedure involves antibiotic prophylaxis, an antibiotic (usually Vancomycin or Teicoplanin) should be added to the regimen. The microbiologist should be consulted for specialist advice.

## 10.8 Emergency Chemotherapy or Radiotherapy Patients

The MRSA status may be unknown, and in view of the high risk nature of the procedure, the patient should commence MRSA suppression therapy as prophylaxis. All emergency admitted patients also require an MRSA admission screen.

If the patient's results are **MRSA negative** then discontinue the Mupirocin and continue with Chlorhexidine 4% skin cleanser washes for the duration of the inpatient stay.

If the patient's results are **MRSA positive** complete the 5 day course of Mupirocin and continue with Chlorhexidine 4% skin cleanser washes for the duration of the inpatient stay.

If the surgical procedure normally requires antibiotic prophylaxis, an antibiotic with activity against MRSA (usually Vancomycin or Teicoplanin) should be

added to the regimen. Further discussion with a pharmacist or microbiologist must be sought.

### **10.9 MRSA Suppression Therapy in Renal In-patients (including non renal cases)**

- 10.9.1** Chlorhexidine 4% skin cleanser washes are used routinely for all patients irrespective of the patients MRSA status.
- 10.9.2** Patients who are MRSA positive should have their suppression therapy prescribed on their treatment chart.
- 10.9.3** In-patients needing an urgent central venous catheter or vascular access procedure already receive skin washes using Chlorhexidine 4% skin cleanser. If the patient is MRSA positive, the treatment is to be extended to hair shampoo and they should be prescribed mupirocin nasal ointment, unless they have received mupirocin within the last six months.

### **10.10 MRSA Suppression Therapy in Renal Patients having a new Venous Dialysis Catheters**

- 10.10.1** All planned patients requiring a 'new' central venous dialysis catheter (temporary or tunnelled) should receive MRSA suppression therapy regardless of MRSA status as follows:
- 10.10.2** If the line is planned, start 4 days before if possible, so that the 5<sup>th</sup> day is the line day.
- 10.10.3** In the event that there are not 5 days in advance to plan this (the majority of cases), start as soon as it is decided the line is required, and continue for 5 days.
- 10.10.4** If further lines are planned on the same admission, no further nasal mupirocin indicated.
- 10.10.5** The course should be completed even if MRSA swab results (which are done routinely by the nursing staff) are negative.

### **10.11 MRSA Suppression Therapy and Screening in Outpatient Haemodialysis Patients (including the Satellite Unit Patients)**

- 10.11.1** Patients having out-patient haemodialysis should be screened every six months. One course of suppression therapy is to be prescribed if the patient is MRSA positive.
- 10.11.2** Re-screening is not indicated after treatment, other than their subsequent routine 6-monthly screen (unless they are having a planned access procedure or are an in-patient, as above).

## **10.12 MRSA Suppression Therapy and Screening in Peritoneal Dialysis Patients**

### **10.12.1 All New Patients**

To have their MRSA screen in the OPD and regardless of the result, they are to receive MRSA suppression therapy 5 days before planned date of insertion of PD catheter.

### **10.12.2 Prevalent Patients**

Prevalent patients to receive an MRSA screen every 6 months.

## **10.13 MRSA Suppression Therapy in Chemotherapy Patients**

**10.13.1** All new MRSA positive patients are to receive full suppression therapy.

**10.13.2** If the patient is readmitted within 6 months, patient to receive Chlorhexidine 4% skin cleanser washes only.

**10.13.3** If the patient is readmitted over 6 months then full suppression therapy can be given.

**10.13.4** Repeat MRSA screens are to be taken every 6 months or sooner if there is a change in the patients clinical condition i.e. tissue breakdown or inflammation of IV devices.

## **10.14 MRSA Suppression Therapy for Patients found to have Positive Results after they have been Discharged from BSUH NHS Trust Hospitals**

**10.14.1** The majority of patients that are discharged from hospital before their positive result is known will not require suppression therapy, particularly if they have no underlying conditions, open wounds and live independently.

**10.14.2** There may be some patients that will require suppression therapy depending upon their individual circumstances. Advice should be sought from the Microbiologist or the Infection Control Nurse at the Primary Care Trust. A primary care clinician will assess whether or not suppression therapy is required.

## 11. Impact Assessment

Following the screening stage of the impact assessment, the Trusts Equality & Human Rights Manager has reviewed the policy and a full impact assessment is not necessary.

## 12. Monitoring for Compliance

The policy will be monitored for effectiveness as outlined in the Organisational framework for Infection Prevention and Control (IC 001) policy.

The ICT monitor compliance to MRSA screening in the Clinical areas monthly. The compliance scores are circulated to the individual ward managers, their matrons and ADN's.

The monthly compliances area also discussed weekly during the Infection Prevention and Control Action Group.

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## **APPENDIX 1 - SINGLE ROOM SOURCE ISOLATION (BARRIER NURSING) PRECAUTIONS**

All non essential equipment must be removed from the single room and housekeeping staff made aware that the patient is in isolation without breaching patient confidentiality.

The patient's visitors must be informed that the patient is in isolation.

### **The following equipment must be available**

#### Outside the room

- Disposable gloves
- Plastic aprons
- Alcohol hand gel
- All of the above should be located in wall mounted dispensers.
- BSUH Trust approved isolation notice on the door.
- Facial protection to be available if patient has a tracheostomy or if there is risk of splashing into the face.

Patient notes should not be kept in the isolation room.

#### Inside the room

- Adequate supply of liquid soap, paper towels and alcohol hand gel
- Clinical waste bin

### **Procedure on entering**

- Staff must decontaminate hands and don apron and disposable gloves.

### **Procedure on exiting**

- Staff must remove their gloves and apron, and dispose of them as clinical waste and decontaminate their hands prior to leaving the room.

### **Other**

- Patient's bed linen to be replaced with 'clean' linen daily to reduce the environmental burden of MRSA.
- The patient's belongings must be kept inside the locker. The locker top should be free of clutter / unnecessary items/equipment. Fruit and other foodstuff must be kept in a sealed container / bag.
- Following the patient's daily wash or shower, their locker tops, tables and the bed frame must be thoroughly cleaned according (Trust's Decontamination (IC 022) policy).
- The patient's bed (including the inner cells of therapy mattresses) must be thoroughly cleaned daily. The mattress, base, underneath, sides, linen rack, poles and cot-sides are to be cleaned daily.
- Crockery/cutlery is not required to be washed separately.

- Fans must not be used as they disperse environmental micro organisms (including MRSA) into the air.
- The isolation room door is to be kept shut when performing chest physiotherapy, or wound dressings and when making the bed.
- The door of the isolation room is to be kept shut at all other times [unless the patient's safety is compromised].

## **APPENDIX 2 - OPEN BAY - SOURCE ISOLATION (BARRIER NURSING) PRECAUTIONS**

The housekeeping staff should be informed of the barrier nursing precautions without compromising patient confidentiality.

The importance of effective environmental decontamination should be emphasised to cleaning staff.

Visitors should be informed of the barrier nursing precautions without compromising patient confidentiality.

### **The following equipment must be available on a trolley at the end of the bed:**

- Disposable gloves
- Plastic aprons
- Alcohol hand gel
- Clinical waste bin
- 'Barrier nursing' notice.

### **Prior to patient contact or contact with the environment:**

- Staff must decontaminate their hands and don apron and disposable gloves prior to contact with EACH of the patient's or their environments.

### **Following contact with EACH patient or their environments:**

- Staff must remove gloves and aprons and dispose of them as clinical waste. They must then decontaminate their hands.

### **Other**

- Patient's bed linen to be replaced with 'clean' linen daily to reduce the environmental burden of MRSA.
- The patient's belongings must be kept inside the locker. The locker top should be free of clutter / unnecessary items/equipment. Fruit and other foodstuff must be kept in a sealed container / bag.
- Following the patient's daily wash or shower, their locker tops, tables and the bed frame must be thoroughly cleaned according (Trust's Decontamination (IC 022) policy).
- The patient's bed (including the inner cells of therapy mattresses) must be thoroughly cleaned daily. The mattress, base, underneath, sides, linen rack, poles and cot-sides are to be cleaned daily.
- Crockery, cutlery is not required to be washed separately.
- Fans must not be used as they disperse environmental micro organisms (including MRSA) into the air.
- Where bays have doors, they should be kept shut when performing chest physiotherapy, or wound dressings and when making the bed.
- Where bays have doors, they should be kept shut at all other times [unless the patient's safety is compromised].

### **APPENDIX 3 - COHORT NURSING**

Cohort nursing is implemented when there are several patients (of the same sex) who are MRSA positive or if there is a recognised outbreak of MRSA.

'Cohorting' is undertaken in dedicated bays. The group of MRSA positive patients should be informed of the reason for them being grouped together in the same bay.

Visitors are to be informed they are entering a 'cohorted' area, i.e. area where barrier nursing precautions are in use.

Provision for nursing staff to engage in cohort nursing is strongly recommended.

Housekeeping staff should be informed of the cohort and arrangements may need to be made for enhanced cleaning of the area.

All non essential equipment must be removed from the cohort area.

#### **The following equipment should be available outside the bay/cohort area**

- Disposable gloves
- Plastic aprons
- Alcohol hand gel
- The above should be available in wall mounted dispensers
- BSUH trust approved isolation notices are placed on the entrances to the cohort area

#### **Inside the bay/cohort area**

- Adequate supply of liquid soap, paper towels and alcohol hand gel
- Clinical waste bin

#### **Procedure on entering the bay/cohort area**

- Staff must decontaminate their hands and don apron and disposable gloves

#### **Procedure on exiting the bay/cohort area**

- Staff must remove their gloves and aprons and dispose of them as clinical waste. They must then decontaminate their hands prior to leaving the area.

#### **Other**

- Patient's bed linen to be replaced with 'clean' linen daily to reduce the environmental burden of MRSA.
- The patient's belongings must be kept inside the locker. The locker top should be free of clutter / unnecessary items/equipment. Fruit and other foodstuff must be kept in a sealed container / bag.
- Following the patient's daily wash or shower, their locker tops, tables and the bed frame must be thoroughly cleaned according (Trust's Decontamination (IC 022) policy).

- The patient's bed (including the inner cells of therapy mattresses) must be thoroughly cleaned daily. The mattress, base, underneath, sides, linen rack, poles and cot-sides are to be cleaned daily.
- Crockery and cutlery is not required to be washed separately.
- Fans must not be used as they disperse environmental micro organisms (including MRSA) into the air.
- Where bays have doors, they should be kept shut when performing chest physiotherapy, or wound dressings and when making the bed.
- Where bays have doors, they should be kept shut at all other times [unless the patient's safety is compromised].

## APPENDIX 4 - SPECIMEN COLLECTION FOR MRSA SCREENING

Black charcoal swabs are used to take the MRSA screen.  
A single swab for the nose (both nostrils) and a separate swab for the perineum.

### Additional sites should be screened if relevant:

- Throat (if perineum not accessible). This site is substituted in renal patients.
- Umbilicus in neonates.
- Unhealed wounds, lesions or ulcers.
- CSU in patients with urinary catheters, and the urethral meatus in male patients with urinary catheters.
- A sputum specimen if the patient has a productive cough.
- The tracheostomy stoma.
- Percutaneous Endoscopic Gastrostomy (PEG) /Radiological Inserted Gastroscopy (RIG) sites.
- Intravenous lines (exit sites) if accessible.

It is not appropriate to undress wounds or intravascular access to take an MRSA screen. If infection is suspected please request routine culture.

### Sites not currently screened unless advised by the ICT.

- Axilla, groin, hairline, vagina, or faecal samples.

### How to take an MRSA screen

Explain the procedure to the patient, ensure all equipment is assembled, and hands of healthcare workers are decontaminated to prevent contamination of the swab.

#### Nose swab.

Gently insert the swab into the anterior nares (just inside the nostrils) perform a circular movement x 3 and repeat in other nostril.

#### Perineum swab

Ensure swab from the perineum (between vagina/scrotum & anal area) rather than the groin.

When sampling dry sites such as the nose, swabs should be moistened in a sachet of sterile normal saline.

Complete the microbiology request form indicating MRSA screen, including date and time, consultants name, ward/clinic. If a nose swab cannot be taken due to surgery please state this on the microbiology form and continue to screen other sites.

N.B. The swabbing of both nose and perineum will detect 93% of colonised patients, and swabs from the nose and throat thought to detect 86% of colonised patients. Swabs from the groin have a considerably lower sensitivity therefore; sampling from this site is not recommended (Ayliffe et al, 1998).

## APPENDIX 5 – SUPPRESSION REGIMEN FOR PATIENTS

Routine topical suppression therapy is mainly indicated for the skin, nose and hair. In exceptional situations, it may be appropriate to use suppression therapy on other sites. This is on the advice of the ICT.

**Skin** - Chlorhexidine 4% skin cleanser (Hibiscrub®) 25 mls to be used daily in bath or shower.

**Hair** – Chlorhexidine 4% skin cleanser (Hibiscrub®) to be used twice a week.

**Nose** – 2% Mupirocin in a paraffin base (Bactroban®) applied to the anterior nares of both nostrils three times a day for 5 days.

[IF INTOLERANCE DEVELOPS DISCONTINUE USE IMMEDIATELY. Please contact the Infection Prevention and Control team for advice]

Alternative anti microbial washes and nasal ointments are available if there are contraindications or allergies to the above. Stocks of Octenisan® antimicrobial wash are available from main theatres at the RSCH and PRH sites. Stocks of Naseptin® nasal ointment are held in pharmacy stock cupboards at the RSCH and PRH. *Before prescribing, check patient allergy status as naseptin contains peanut oil.*

### Procedure for optimal skin decontamination

- Bathe or shower using 25 mls undiluted Chlorhexidine 4% skin cleanser by applying the solution to wet skin using hands or a disposable cloth.
- Wash all areas of the body vigorously paying particular attention to the folds of the skin and around the nape of the neck up to the hair line.
- The Chlorhexidine should be in contact with the skin for at least 1 minute.
- Rinse the skin well then dry using a clean towel.
- A skin emollient may be used following the wash, advised in patients with dry skin or the elderly.

### Procedure for optimal hair decontamination

- Wash hair the same way as using a shampoo. Rinse well. The use of a hair conditioner is advised.

### Procedure for applying nasal Mupirocin

- Wash hands
- Squeeze a small amount of ointment (about the size of a match head onto the little finger or a cotton bud
- Apply the ointment to the inside of one nostril, repeat for the other.
- Close the nostrils by pressing the sides together for a moment to spread the ointment inside the nostrils.
- If applied correctly, the patient will be able to taste the ointment in the back of their throat.
- Wash hands.

## APPENDIX 6

Brighton and Sussex   
University Hospitals  
NHS Trust

Headquarters  
The Royal Sussex County Hospital  
Eastern Road  
Brighton  
BN2 5BE

Date

Tel: 01273 696955

Dear

### Re: MRSA screening results

I am writing to tell you that MRSA has been found in the swabs taken at your pre-operative assessment, which means that you are carrying the MRSA germ but **does not** necessarily mean that you have an MRSA infection.

MRSA is a common germ that lives on the skin or in the nose. Many people have MRSA harmlessly living on their body without experiencing any symptoms or it making them ill. These people are known as MRSA carriers.

If MRSA enters the body through a wound, tube or drip it can develop into a more serious infection in the blood. This is extremely rare because we have many measures in place and do all we can to prevent this happening.

When you came for your pre-operative assessment at the hospital you will be aware that, as part of a national MRSA screening programme, swabs were taken to test if you are carrying MRSA. By finding out which patients are MRSA carriers before they come into hospital, we can take additional precautions to reduce the risk of infection for them and other patients.

Alongside everything else we are doing, you can help to further reduce the risk of infection by using a special body wash and nose ointment in the four days before your operation. These can help to get rid of MRSA on your skin and in your nose.

We have written to your GP informing them of your results and asking them to prescribe the following:

- 500ml Chlorhexidine 4% skin cleanser wash
- 3g Bactroban® nasal ointment (containing Mupirocin)

Please collect this prescription from your GP and take it to the local pharmacist as you would any other prescription.

Further information including directions for using this body wash and nasal ointment are clearly set out in the enclosed leaflet. For additional advice please contact your GP or the hospital's Infection Control Team on 01273 696955 ext 4595.

Yours sincerely

## APPENDIX 7

Brighton and Sussex   
University Hospitals  
NHS Trust  
Headquarters  
The Royal Sussex County Hospital  
Eastern Road  
Brighton  
BN2 5BE

Date

Tel: 01273 696955

Dear Dr

Re: [patient name]

The above patient was screened for MRSA during a recent pre-operative assessment and was found to be MRSA colonised (see attached results). A letter explaining these results and an information leaflet have been sent to the patient. The distinction between MRSA colonisation and MRSA infection has been clearly stated in this communication. Patient-friendly terminology has also been used - for example 'MRSA carrier' instead of 'MRSA colonised' - in order to prevent unnecessary alarm and confusion.

The patient is required to undergo a course of MRSA suppression therapy prior to being admitted for surgery. Please arrange for the following to be prescribed:

- 500ml Chlorhexidine 4% skin cleanser wash
- 3g Bactroban® nasal ointment (containing mupirocin)

Directions for use are below (please specify on prescription form):

- Treatment must start four days before patient is admitted for surgery.
- Patient to have a daily shower, bath or strip-wash using Chlorhexidine 4% skin cleanser wash to the body and hair is to be washed with Chlorhexidine 4% skin cleanser wash at least twice during the four days.
- Mupirocin nasal ointment to be applied to both nostrils three times a day.

The aim is that the patient's elective procedure takes place on the last (5<sup>th</sup>) day of treatment when protection is considered to be maximum.

The MRSA Screening Programme is a national initiative that has been introduced for patients undergoing elective hospital procedures. It is anticipated that once the programme is fully operational, around 4000 patients per year being admitted to Brighton and Sussex University Hospitals Trust (BSUH) will test positive for MRSA colonisation. This is equivalent to 5 per cent of the population.

Please familiarise yourself with the MRSA suppression regime as some patients will require extra support in addition to the communication they receive from the hospital. For advice and support, healthcare providers and patients can contact our Infection Prevention and Control Team on 01273 696955 ext 4595.

Yours sincerely

## Appendix 8

Brighton and Sussex   
University Hospitals  
NHS Trust  
Headquarters  
The Royal Sussex County Hospital  
Eastern Road  
Brighton  
BN2 5BE

Date

Tel: 01273 696955

Dear

### Re: MRSA screening results

I am writing to tell you that MRSA has been found in the swabs taken at your recent ante natal assessment, which means that you are carrying MRSA but **does not** mean that you have an MRSA infection.

MRSA is a common bacteria (germ) that lives on the skin or in the nose. Many people have MRSA living harmlessly on their body without experiencing any symptoms or it making them ill. These people are known as MRSA carriers.

When you came for your ante-natal assessment at the hospital, swabs were taken as part of the national MRSA screening programme. By finding out who is an MRSA carrier before they come into hospital, additional precautions can be taken to reduce the risk of infection to them and to other women.

To help reduce the risk of infection, we would advise using a special hair and body wash during the five days before your expected delivery date / hospital admission / expected date of caesarean section.

This treatment is safe to use during pregnancy and can help reduce the amount of MRSA on your skin.

We have written to your GP informing them of your results and asking them to prescribe the following:

- 500ml 4% Chlorhexidine gluconate to be used as a body and hair wash

Please collect this prescription from your GP and take it to the local pharmacist as you would any other prescription.

Further information, including directions for using this body wash are found in the in the enclosed MRSA suppression leaflet.

For additional advice please contact your GP or the hospital's Infection Control Team on 01273 696955 ext 4595.

Yours sincerely,

## Appendix 9

Brighton and Sussex   
University Hospitals  
NHS Trust  
Headquarters  
The Royal Sussex County Hospital  
Eastern Road  
Brighton  
BN2 5BE

Date

Tel: 01273 696955

Dear Dr

Re: [patient name] **MRSA screening results**

The above woman has been screened for MRSA during a recent ante-natal assessment and was found to be MRSA colonised (see attached results). A letter explaining these results and an information leaflet have been sent to her. The distinction between MRSA colonisation and MRSA infection has been clearly stated in this communication. Lay terminology has been used - for example 'MRSA carrier' instead of 'MRSA colonised' - in order to prevent unnecessary alarm and confusion.

This woman is required to undergo a course of MRSA suppression therapy prior to her hospital admission. Please arrange for the following to be prescribed:

- 500ml 4% Chlorhexidine gluconate to be used as a body and hair wash.

Directions for use are below (please specify on prescription form):

- Treatment must start four days before admission, caesarean section or expected delivery date.
- The woman is to have a daily shower, bath or strip-wash using 4% chlorhexidine gluconate as a body wash and where possible, hair is to be washed with 4% chlorhexidine gluconate at least twice during the four days.

The aim is that the woman's delivery takes place on the last (5<sup>th</sup>) day of treatment when protection is considered to be maximum.

In the event of an unanticipated hospital admission the woman will be required to commence her suppression therapy on day of admission.

The MRSA Screening Programme is a national initiative that has been introduced for all patients / clients undergoing elective hospital procedures.

Please familiarise yourself with the MRSA suppression regime as some patients will require extra support in addition to the communication they receive from the hospital. For advice and support, healthcare providers and patients can contact our Infection Control Team on 01273 696955 ext 4595.

Yours sincerely

## Appendix 10

### The Management and care of patients with Meticillin resistant *Staphylococcus aureus* in the Operating Department

This guideline is produced to provide theatre Practitioners with information to manage patients with Meticillin resistant *Staphylococcus aureus* (MRSA) colonisation and/or infection. It is based upon The Management and care of patients with Meticillin resistant *Staphylococcus aureus* (IC 007) Policy

Reducing infections is a core standard in the Code of Practice for the prevention and control of HCAI's (2008) Health Act and a key organisational priority for BSUH, setting high standards of patient care and safety when managing patients with MRSA, preventing transmission.

Infection Control is the responsibility of all staff associated with the delivery of patient care and their clinical need must not influence the quality of care.

To facilitate the management of MRSA, the following are advised. For further information please refer to IC 007 policy or call Infection Control x 4595

#### Management of MRSA positive patients in Theatres.

Step 1: Identification of all known MRSA positive patients



When calling the ward for your patient please request the MRSA status of the patient.

All elective patients are screened pre-operative, all emergency patients should be screened within two hours of their admission.

All MRSA positive patients should have commenced their MRSA suppression therapy regimen comprising of:

Skin suppression therapy – 4% Chlorhexidine gluconate daily washes  
Nasal suppression therapy - 2% Mupirocin for 5 days

Patients being transferred to theatres should do so in clean sheets and on a clean bed.

Step 2: Please advise the Recovery staff of any MRSA positive patients as soon as it is known so they can plan the patient's care. Please provide as much information as possible to facilitate with the delivery of their care.

Step 3: Please advise the Anaesthetist and Anaesthetic Nurse/ODP of the MRSA status of patient as those having prosthetic implant surgery may require additional antibiotic prophylaxis.

**NB. If the patient is an emergency admission they should already have had an emergency Surgery MRSA Risk Assessment form completed by the anaesthetist. See Appendix 10**

Step 4: Remove all unnecessary equipment from theatres and the anaesthetic room, to facilitate rapid environmental cleaning time. All surfaces will require cleaning with chlorine releasing disinfectants such as Chlorclean® or Tristel®.

### Management of MRSA positive patients in Recovery

The patient with MRSA may be nursed in the Recovery suite.

Strict application of Standard Infection Control precautions must be observed at all times.

The following equipment must be available in the patient's bay or on a trolley at the end of the bed.

- Disposable gloves
- Plastic (coloured apron)
- Alcohol hand gel
- Clinical waste bin
- 'Barrier nursing' notice

Staff entering and leaving the patient's bay should observe the five moments of hand hygiene.

The following are also advised.

- All non essential equipment must be removed
- Whenever possible patient equipment should be dedicated to the patient with MRSA and not shared with other patients
- Equipment that is shared with other patients should be decontaminated in between patient using detergent wipes and the surfaces dried thoroughly.
- Whenever possible disposable items are recommended
- Whenever possible, a dedicated nurse is advised to recover the patient.
- The curtains may be drawn to provide a simulated barrier

**If the MRSA patient has large open wounds / heavy exudate / known skin shedding it may be advised that they be recovered away from other patients with uncovered wounds / vascular access. In this instance it would be prudent to recover them in theatres.**

- Please use the dedicated infection control box which contains a limited supply of post-operative consumables.

## Environmental cleanliness

### Standard Cleaning

A high standard of environmental cleaning should be carried out as part of the daily routine by housekeeping staff. Dust must be removed from horizontal surfaces, corners and ledges.

Following discharge a standard cleaning is recommended using chlorine releasing solutions such as Chlorclean® or Tristel®, paying particular attention to areas that have come into contact with the patient and areas that are perceived to have become heavily contaminated.

### Terminal Cleaning

A terminal clean is advised when the patient has been in recovery for an extended period of time / overnight, or if it is thought that the environment has been excessively contaminated by bodily fluids.

Prior to a terminal cleaning, nursing staff should place all disposable items into the clinical waste stream.

Linen curtains should be sent via the 'infectious stream' for laundering. Disposable curtains should be replaced with new.

Please inform ISS x 4357 (or contact switchboard for out of hours number), if the area requires a terminal clean which includes a curtain change, when the patient is discharged from the department.

### Transferring MRSA positive patients:

- The MRSA status should not impede discharge, the receiving ward should be informed of the patients MRSA status and that they have been barrier nursed
- Patients being transported must have intact dressings, no visible exudates.
- Operating department orderlies are to be informed that the patient requires barrier nursing without compromising patient confidentiality
- Trolleys, wheelchairs and other surfaces that have come into contact with MRSA positive patient must be cleaned in accordance with the Decontamination (IC 022) policy.
- Operating Department Orderlies need not wear gloves unless they intend to make direct contact with the patient or their environment during the transfer.
- Following direct contact episodes with the patient gloves and aprons should be removed and disposed of as clinical waste. Hands must then be cleaned with alcohol hand gel or washed with liquid soap and water and dried thoroughly.

If any further information is required please refer to IC 007 policy or contact Infection Prevention Control Department x 4595

**APPENDIX 11 - Emergency Surgery MRSA Risk Assessment**

The following questions based on recognised risk factors for MRSA carriage will enable a risk assessment of MRSA status of those patients requiring emergency surgery prior to MRSA screening results being available.

Has the patient previously been MRSA colonised at any site? <i>*Check WinPATH / OASIS</i>	Yes / No
Has the patient had a hospital admission within the last year?	Yes / No
Is the patient a nursing home or long-term care facility resident?	Yes / No
Is the patient a healthcare worker with direct patient contact?	Yes / No
Has the patient been transferred from abroad?	Yes / No
Is the patient a known intravenous drug user?	Yes / No
Does the patient have a long-term (>30 days) indwelling device? e.g. urinary catheter, IV line, PEG tube	Yes / No
Does the patient have a chronic wound? e.g. leg ulcer	Yes / No

If the answer is **YES** to any of the above questions then MRSA colonisation is more likely & the following actions should be undertaken:-

- Commence MRSA suppression therapy (detailed below).  
Review continued need with MRSA screening results
- Surgical antimicrobial prophylaxis as per known MRSA positive patient  
(See *Surgical Antimicrobial Prophylaxis guidelines*)

<b>MRSA suppression therapy</b> If MRSA colonised at <u>any</u> site	Mupirocin 2% nasal ointment tds to both nostrils  <i>Do NOT repeat within 6 month period</i>	5 days
	Chlorhexidine 4% skin cleanser (25mL) as a bodywash ONCE daily + hairwash TWICE weekly	Until discharge

**Risk Assessment completed by:-**

Print name: .....

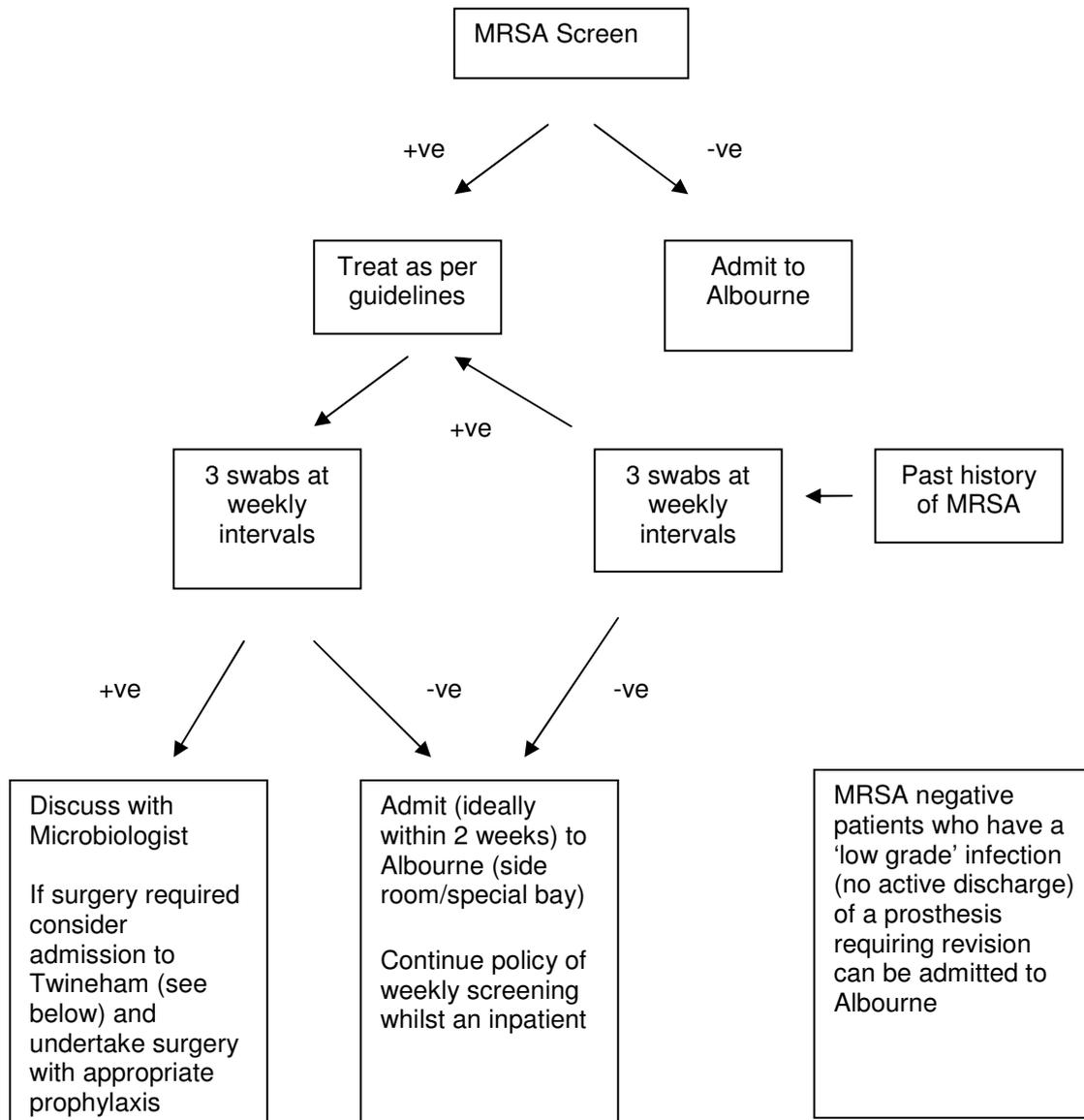
Signature: .....

Date: .....

## Appendix 12

### MRSA Screening Algorithm Department of Orthopaedics Princess Royal Hospital Site

#### 1. Elective patients



## 2. Twineham Ward

Placement of patients will depend on numbers of cases in different categories:

*In a separate area of the ward with separate sluice, barrier nursing etc.:*

1. MRSA infected cases  
End bay or end side rooms
2. Infections (discharging) with other organisms  
Second bay or end side rooms

*In the 'main' part of the ward:*

3. MRSA colonised  
Barrier nursed  
Other side rooms/ own bay (not with actively infected patients, not with MRSA  
-ve patients)
4. MRSA -ve patients  
Remaining bays