

Meticillin Resistant *Staphylococcus Aureus* (MRSA) Prevention Management and Screening Policy

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REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

October 2021 Details and information have been consolidated. Infection Prevention MRSA pathway included and links/QR code. Additions to MRSA high risk category group/area. Removed PVL appendix see section 1.1.6. Requirements for hair washing changed.

KEY WORDS

MRSA, MRSA screening, Meticillin Resistant *Staphylococcus aureus*, PVL Panton-Valentine Leukocidin

1 INTRODUCTION AND OVERVIEW

- 1.1 This document sets out the University Hospitals of Leicester (UHL) NHS Trusts Policy and Procedures for Meticillin Resistant *Staphylococcus aureus* (MRSA) prevention, management and screening.
- 1.2 MRSA refers to a group of gram-positive bacteria, that are resistant to a wide variety of antibiotics e.g. Meticillin/Flucloxacillin, which is distinct from other strains of *Staphylococcus aureus*.
- 1.3 *Staphylococcus aureus* is part of the normal bacteria present in the upper respiratory tract, on skin and in the gut mucosa.
- 1.4 Prompt identification of patients with carriage (colonisation) or infection is important in hospital settings to prevent the risk of transmission to other patients.
- 1.5 MRSA is not a significant risk to healthy people, including health care workers and visitors, but can cause serious infection in vulnerable patients. MRSA is associated with increased morbidity and mortality.
- 1.6 UHL has a targeted approach to screening patients prior to or on admission in those areas where risk of MRSA acquisition and subsequent infection is high.
- 1.7 This policy does not take into account infection with Panton Valentine Leukocidin (PVL) producing strains of *Staphylococcus aureus*. For information on PVL please use the link: <https://www.gov.uk/government/collections/panton-valentine-leukocidin-pvl-guidance-data-and-analysis#diagnosis-and-management>

2 POLICY SCOPE

- 2.1 This policy applies to all clinical members of staff employed within University Hospitals of Leicester NHS Trust and staff working in a contracted capacity.
- 2.2 This policy applies to all patients including children; for neonates refer to appendix 4 only.

3 DEFINITIONS AND ABBREVIATIONS

CMG	Clinical Management Group: link to more details http://insite.xuhl-tr.nhs.uk/homepage/corporate/simplifying-our-management-structures
Colonisation	MRSA present on or in the body but causes no ill effects
CVC	Central venous catheter
CVAD	Central venous access device
Infection	MRSA causes clinical consequences e.g. inflammation, swelling and pus formation. MRSA infection can occur on the skin, in soft tissues, lungs, bone and joint or in the blood stream
Midline	A midline catheter lies within a vein close to the patients shoulder. It is about half the length of a PICC line catheter.
MRSA	Meticillin Resistant <i>Staphylococcus aureus</i>
NNU	Neonatal Unit. See appendix 4
PICC	Peripherally inserted central catheter
PVL (Panton Valentine Leukocidin)	Cytotoxin produced by <i>Staphylococcus aureus</i>
Topical suppression treatment (decolonisation)	Daily antibacterial wash and nasal antibiotic ointment. <ul style="list-style-type: none"> ▪ <i>Stellisept once daily washes, including hairline. When hair is washed use Stellisept in addition to shampoo/conditioner</i> ▪ <i>Nasal Mupirocin (Bactroban®) 2% ointment Three times a day into each nostril</i> <p>Given to all high risk category patients and patients with a history of MRSA carriage.</p>

4 ROLES AND RESPONSIBILITIES

- 4.1 The role and responsibilities from chief executive and director of infection prevention down through the organisation can be found in the UHL Infection Prevention Policy B4/2005. Link: <http://insitetogether.xuhl-tr.nhs.uk/pag/pagdocuments/Infection%20Prevention%20UHL%20Policy.pdf>
- 4.2 Each UHL employee has a responsibility to patients, co-workers and members of the public to ensure that they are aware of their responsibilities towards infection prevention and are aware of the guidelines for the management of patients in the area in which they work.
- 4.3 The CMG Heads of Nursing and Clinical Directors are responsible for ensuring that the appropriate screening protocols are in place to ensure all eligible patients are screened within their CMG. They are also responsible for ensuring all staff within their CMG are made aware of this policy. This must be done at local induction and then when any changes are made to the policy and/or local protocol.
- 4.4 Members of the Infection Prevention Team are responsible for ensuring that all guidance is evidence-based and current. They are responsible for advising staff on management of patients with MRSA in accordance with Trust policy.

5. POLICY IMPLEMENTATION AND ASSOCIATED DOCUMENTS

5.1 Identifying patients that require MRSA screening and the management for all patients including children (for neonates see appendix 4)

5.1.1 Inpatients within UHL are categorised into three risk groups for MRSA management. These risk groups: high, intermediate and low reflect the risk of acquiring an infection as opposed to colonisation with MRSA. Details are provided in table 1 below.

5.1.2 All eligible patients will be screened for MRSA carriage as listed in table 1. Exceptions for MRSA screening in these patient groups are also listed.

Table 1: MRSA Risk Category Groups/Areas: Screening and Patient Management

High Risk Group/Areas	Intermediate Risk Group/Areas	Low Risk Group/Areas
<p><u>Areas</u></p> <ul style="list-style-type: none"> • Critical care units adult and paediatric (ITU, CICU, PICU, Neonates) • Children’s high dependency • Cardiac and thoracic surgery (adults) • Cardiology • Paediatric cardiac surgery and cardiology • All adult surgical wards (general surgery, specialist surgery) including surgical acute care units • Caesarean section patients • Elective and trauma orthopaedic wards • Gastroenterology wards • Gynaecology wards • Nephrology and transplant wards <p><u>Patient Groups</u></p> <ul style="list-style-type: none"> • All patients (adults and children) with a history of MRSA • Diabetes mellitus (adults) • All inpatients with or planning a central venous access device (i.e. PICC /CVAD) and Midlines • Patients transferred from intermediate or low risk ward area • Patients from nursing/residential homes 	<p>All adult patients <u>not</u> included in the High risk category</p> <ul style="list-style-type: none"> • Paediatric oncology patients 	<p>All paediatric patients <u>except</u> those in the high or intermediate risk groups</p> <ul style="list-style-type: none"> • All Day case patients
<p>All patients transferred from another hospital outside of UHL need to be isolated and screened for MRSA on admission (contact isolation precautions required)</p>		

Screening		
High Risk Group/Areas	Intermediate Risk Group/Areas	Low Risk Group/Areas
<ul style="list-style-type: none"> All patients require MRSA screening prior (elective admissions) or on admission (within 6 hours) Elective C-section patients to be screened. Emergency C-section patients do not require an MRSA screen but will need to receive topical suppression treatment 	<p>MRSA screening is <u>only</u> required for patients in high risk groups i.e.</p> <ul style="list-style-type: none"> ➤ Patients with a history of MRSA carriage ➤ Patients from nursing/residential home ➤ Adult patients with Diabetes mellitus ➤ Patients having a planned central venous catheter inserted 	<ul style="list-style-type: none"> MRSA screening required for all patients with a history of MRSA carriage (high risk category)
MRSA Screening Exceptions List		
All eligible patient will be screened for MRSA carriage with the exception of the following patient groups		
<ul style="list-style-type: none"> All admissions where there is no overnight stay All patients attending day case units (screen patients with a history of MRSA carriage and where elective and emergency patients are mixed) 		
Initiate Treatment		
<p>All patients require topical suppression treatment:</p> <ul style="list-style-type: none"> Daily Stellisept wash Nasal Mupirocin (Bactroban®) 2% ointment (n.b. Elective Patients will commence Stellisept and Mupirocin 3 days prior to their admission). 	<p>All patients not included in the high risk category require:</p> <ul style="list-style-type: none"> Daily Stellisept wash <p>All patients in the high risk category groups that are in intermediate risk category areas (e.g. patients with a history of MRSA carriage/patients from nursing/residential home; All inpatients with a central venous access device (PICC) or Midline/Adult patients with Diabetes mellitus) required:</p> <ul style="list-style-type: none"> Daily stellisept wash and nasal Mupirocin (Bactroban®) 2% ointment 	<p>All patients other than those in the intermediate or high risk categories <u>do not</u> require topical suppression treatment</p>

5.1.3 Further information is available on the infection prevention pathway for MRSA, see appendix 1 or [http://insitotogether.xuhl-tr.nhs.uk/SP2007/Infection%20Prevention%20and%20control/\(IPP%20MRSA\)%20IPP%20Metacillin%202018%20v3.pdf](http://insitotogether.xuhl-tr.nhs.uk/SP2007/Infection%20Prevention%20and%20control/(IPP%20MRSA)%20IPP%20Metacillin%202018%20v3.pdf)

5.1.4 Patients will be screened within 6 hours for an emergency admission and up to 18 weeks for an elective admission.

- 5.1.5 Patients newly identified with MRSA see appendix 2
- 5.1.6 Patients with a history of MRSA see appendix 3
- 5.1.7 CMGs with specific procedures for screening will produce guidelines/procedures accordingly, which must be used in conjunction with this policy.

5.2 MRSA swabbing technique:

- 5.2.1 MRSA swabs (blue top) should be pre-moistened with sterile water or sodium chloride 0.9%, if the site to be swabbed is dry i.e. nose and perineum. This helps bacteria adhere to the swab.
- 5.2.2 The sites for MRSA screening are:

- Nose (one swab for both nostrils)
- Perineum

Risk factors:

- Urine (if catheterised)
- Sputum (if productive cough)
- All areas of non-intact skin: wounds, ulcers, skin lesions, urostomy, PEG, drain sites (except clean intact surgical wound).
- Screen all lines when able: including CVAD, Vascath (except peripheral cannula sites)

5.3 Identification of patients with MRSA

- 5.3.1 The infection prevention team will inform the ward or department concerned and flag Patient Centre and Nerve Centre with an MRSA alert (during office hours).
- 5.3.2 The clinical area is responsible for putting an alert on the patient's medical notes with the Hazard Alert form placed inside the front cover and the alert label on the outside.

5.4 Isolation precautions

- 5.4.1 See appendix 2: newly identified with MRSA carriage and appendix 3: with a history of MRSA carriage.
- 5.4.2 All patients directly transferred from another hospital outside of UHL require contact isolation precautions until one negative MRSA screen available.

5.5 Treatment

- 5.5.1 The current suppression (decolonisation) treatment regimen is antibacterial body wash (Stellisept: daily washes (including hairline) and Nasal Mupirocin (Bactroban®) 2% ointment three times a day into each nostril). When washing hair use Stellisept wash in addition to shampoo/conditioner
- 5.5.2 The following patients all require topical suppression treatment (irrespective of their MRSA screen result). Treatment should commence following screening. All elective patient admissions should start topical suppression treatment 3 days prior to admission.
 - Patients identified with MRSA carriage (MRSA detected)
 - All patients within the high risk category group (see 5.1.2 and table 1)

5.5.3 Further information see appendix 2 or 3

5.6 Decontamination of the environment and equipment

5.6.1 The environment and re-usable patient equipment require **Amber Clean** in accordance with the Healthcare Environment Cleaning Policy and Procedures. <http://insitetogether.xuhl-tr.nhs.uk/pag/pagdocuments/Cleaning%20-%20Healthcare%20Environment%20UHL%20Policy.pdf>

6 EDUCATION AND TRAINING REQUIREMENTS

- 6.1 Annual infection prevention training is mandatory for all staff within the Trust including E-learning/workbooks.
- 6.2 CMG Senior Managers are responsible for ensuring all staff are made aware of this policy and local screening protocols for their area. This must be done at local induction and when any changes are made to the policy and/or local protocol.
- 6.3 The infection prevention team will cascade awareness of the MRSA policy via CMG Infection Prevention Operational Group (IPOG) meetings, link staff network, the infection prevention Newsletter and INsite home page.

7 PROCESS FOR MONITORING COMPLIANCE

Element to be monitored	Lead	Tool	Frequency	Reporting arrangements
The ward metrics tool and IP standard and transmission-based precautions audit include compliance with the MRSA screening and topical suppression treatment	Lead Nurse Infection Prevention	Ward metrics audit tool IP standard and transmission-based precautions audit tool	Monthly Biannually	Report completed and shared with each CMG giving compliance score and identifying areas of non-compliance. CMGs required to put measures in place to improve compliance
Hand Hygiene Compliance at ward/department level	Heads of Nursing/Clinical Directors	Hand Hygiene audit tool	Monthly	Scores reported at CMG IP Operational Group meetings. Areas of non-compliance actioned by CMG. Hand hygiene compliance reported externally to commissioners
Cleaning and Decontamination	Decontamination Lead	Decontamination audit tool	Annually	CMGs receive completed report highlighting areas of non-compliance. Report also submitted to Trust Infection Prevention Assurance Committee

8 EQUALITY IMPACT ASSESSMENT

- 8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
- 8.2 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

9 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

[Coia, J.E., Duckworth, G.J., Edwards, D.I., Farrington, M., Fry, C., Humphrey, H., Mallagan, C., Tucker, D.R. \(2006\) Guidelines for the control and prevention of *Meticillin Resistant Staphylococcus aureus* Journal of Hospital Infection; 63 \(S1\) S1-S44](#)

[Department of Health \(2010\) *The Health and Social Care Act 2008: Code of Practice for the NHS on the prevention and control of Healthcare associated infections and related guidance* Department of Health, London](#)

[Department of Health \(2014\) *Implementation of Modified MRSA screening guidance for NHS*.Department of Health, London.](#)

[Fuller, C., Robotham, J., Savage, J., Deeny, S., Hopkins, S., Cookson, B., Stone, S., \(2013\) *The National One Week Prevalence Audit of MRSA screening*. University College London.](#)

[Health Protection Agency \(2008\) *Guidance on the diagnosis and management of PVL-associated Staphylococcus aureus infections \(PVL-SA\) in England* Health Protection Agency, London](#)

[Loveday, H.P., Wilson, J.A., Pratt, R.J., Golsorkhi, M., Tingle, A., Bak, A., Browne, J., Prieto, J., Wilcox, M. \(2014\) *epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England*. 2014 Journal of Hospital Infection 86 \(S1\) S1- S70](#)

Reducing MRSA Bacteraemia with Topical Disinfection (paper presented to Trust board. (2008)

10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

- 10.1 This updated version of the Policy will then be uploaded and available through INsite Documents and the Trust's externally-accessible Freedom of Information publication scheme. It will be archived through the Trusts PAGL system.
- 10.2 This document will be reviewed every 3 years unless there is change to national guidance sooner.

Appendix 1 Infection Prevention MRSA Pathway

M.R.S.A.

Meticillin Resistant
Staphylococcus aureus



PATIENT I.D. LABEL

This MRSA Pathway is only required for patients who have:

1. Direct transfer from UK hospitals
2. Patients transferred from intermediate/low risk into high risk areas
3. Patients admitted requiring an MRSA screen or awaiting result that are in the high risk area
4. Previous carriage (MRSA alert) or newly MRSA positive result

(For details see: MRSA Prevention Management and Screening Policy: section 5.1.2 table 1)

Screening Sites:

The sites for screening for MRSA are:

- Nose (one swab for both nostrils)
- Perineum

Risk factors:

- Urine (if catheterised)
- Sputum (if productive cough)
- All areas of non-intact skin: wounds, ulcers, skin lesion, urostomy, PEG sites etc.
- Screen ALL lines when able: i.e. PICC, CVAD, Vascath

(Except clean intact surgical wounds and peripheral cannula sites)

- Inform the patient of the reason for taking the swab and explain the procedure
- Obtain verbal consent
- Clean hands and put on PPE
- Moisten swab with sterile saline or water
- Swab required sites, collect urine/sputum if required
- Replace in tube
- Remove PPE and clean hands
- Label specimens and place in sealed bag

Admission Screen

BLUE swabs for skin/wounds
RED top pot for urine

Sent by: _____ Date sent _____

- Nose & Perineum swabs: Result:

Risk factors:

CSU (if catheterised) Result:
Sputum (if productive) Result:
Other(s) (State all): Result:

Isolation Precautions

Patients from 1, 2 & 4 above

- Contact Precautions
- Complete the isolation risk assessment label and place in patient medical notes
- Send ICE referral to IP team
- Complete a Datix if side room door required to be kept open or patient is isolated in a Bay

Patients from 1 and 2 above (without a history of MRSA carriage):

- 1 negative MRSA screen (including risk factors) prior to moving out of contact isolation

Patient from 4 above (previous carriage (MRSA alert) or newly MRSA positive result:

- ALL risk factors are no longer present or 3 consecutive negative screens including risk factor(s) received (for elective admissions: last screen within 18 weeks). Contact isolation can be discontinued
- **Patients with risk factor(s) need to be screened weekly**
- Record all re-screening on the reverse of this page.

Patients from 2, 3, 4 above

- Topical suppression treatment for duration of hospital stay (daily Stellisept wash and nasal Mupirocin (Bactroban) 2% ointment or equivalent)

Date 1 st re-screen.....			Date 2 nd re-screen.....			Date 3 rd re-screen.....		
Risk Factor	Result	Signature	Risk Factor	Result	Signature	Risk Factor	Result	Signature
	Positive Negative			Positive Negative			Positive Negative	
	Positive Negative			Positive Negative			Positive Negative	
	Positive Negative			Positive Negative			Positive Negative	
	Positive Negative			Positive Negative			Positive Negative	
	Positive Negative			Positive Negative			Positive Negative	
	Positive Negative			Positive Negative			Positive Negative	

Date of Weekly re-screen	Signature	Result (Circle) see ICE for details
		Positive / Negative
		Positive / Negative
		Positive / Negative
		Positive / Negative
		Positive / Negative
		Positive / Negative

MRSA Topical Suppression Treatment: Patients from 2, 3, 4 (PTO): for duration of hospital stay
Stellisept.

- Apply directly to moistened skin daily on a wash cloth (Do not dilute in a wash bowl) including hairline
 - After at least 30 seconds, rinse with clear water
 - When hair is washed use Stellisept in addition to shampoo/conditioner
- Nasal Mupirocin (Bactroban) 2% ointment** or equivalent
- Apply to both nostrils three times a day. Naseptin (not for patients with nut allergies) apply to both nostrils four times a day

Transfer/Discharge planning:

If the patient is being transferred between wards, other departments (e.g. Theatres/X-ray) or hospitals then the receiving area **must** be informed of their suspected colonisation/ infection before the transfer. The receiving area must have appropriate isolation facilities available for patients with MRSA. Patients with MRSA requiring contact isolation precautions must be transferred using a clean trolley or chair.

Cleaning on transfer or discharge: Contact 17888

On transfer/discharge of the patient, the room must have an **AMBER CLEAN** this process will involve the use of **CHLORCLEAN** and a curtain change.

At a Glance: MRSA

Meticillin-resistant *Staphylococcus aureus* (MRSA) refers to a group of [gram-positive bacteria](#), that is resistant to a wide variety of antibiotics, e.g Meticillin/Flucloxacillin, which is distinct from other strains of *Staphylococcus aureus* and is part of the normal bacteria present in the upper respiratory tract, on skin and in the gut mucosa. MRSA is responsible for several difficult-to-treat [infections](#). Prompt identification of patients with carriage (colonisation) or infection is important in hospitals settings to prevent risk of spread to other patients.



Introduction

This appendix provides information for the care and management of all patients identified (i.e. positive MRSA swab/specimen) as having MRSA carriage. The two tables below provide information for the care and management of the following patients groups:

- Table 1: Hospital in-patients (adults and paediatrics for NNU see appendix 4)
- Table 2: Elective hospital patients (screen at pre-assessment)

Table 1: Actions to be taken when MRSA is first identified for all in-patients

	Action
1.	Use the Infection Prevention MRSA pathway see appendix 1 or link below: http://insitetogether.xuhl-tr.nhs.uk/SP2007/Infection%20Prevention%20and%20control/(IPP%20MRSA)%20IPP%20Metacillin%202018%20v3.pdf
2.	MRSA screen, if not already done this admission. Nose and perinenum and risk factor(s) <u>Risk factors:</u> <ul style="list-style-type: none"> • Urine (if catheterised) • Sputum (if productive cough) • All areas of non-intact skin: wounds, ulcers, skin lesion, urostomy, PEG sites etc. • Screen all lines when able: including, CVAD, PICC, Vascath <p>(N.B. except: clean intact surgical wounds and peripheral cannula sites)</p>
3.	Commence Contact isolation precautions in a single room and notify infection prevention electronically (within four hours) that this has been done. If a single room is not available a risk assessment must be done and a datix form completed.
4.	If the patient has an infection (urine, wounds, sputum) discuss with microbiology medical staff.
5.	If MRSA is present in a wound then refer to tissue viability team.
6.	All patients (adults and children) require topical suppression treatment for the duration of their hospital stay. Explain to the patient/parents how to use the treatment and provide an information leaflet (see link below) Topical suppression (decolonisation) treatment regimen: <ul style="list-style-type: none"> • Daily antibacterial body wash (Stellisept) including hairline. When washing hair use Stellisept wash in addition to shampoo/conditioner • Nasal Mupirocin (Bactroban®) 2% ointment three times a day into each nostril <p>If discharged within 5 days from starting topical suppression treatment the patient needs to continue, following discharge, to complete the minimum treatment regimen (5 days).</p> <p>https://yourhealth.leicestershospitals.nhs.uk/library/corporate-nursing/infection-prevention/140-how-to-use-antibacterial-wash-and-nasal-ointment-to-reduce-risk-of-infection</p>

7.	<p>Ceasing Contact precautions: After receiving five days continuous suppression treatment (daily Stellisept wash and Nasal Mupirocin (Bactroban®) 2% ointment) three times a day into each nostril:</p> <p>A. No risk factor(s):</p> <ul style="list-style-type: none"> • Patients may be moved out of a single room if they have received five days of daily antibacterial washes and nasal ointment three times daily and does not have any risk factors. • All equipment removed from the room must be decontaminated before placing in the bay, Amber Clean. Alternatively, move the patient and their belonging into a clean bed-space and request Amber clean of the side-room. <p>(Note: if the patient subsequently develops risk factors, follow B: patient with risk factors)</p> <p>B. Patient with Risk Factor(s)</p> <ul style="list-style-type: none"> • If a patient has one or more risk factors (see 2 above) continue isolation precautions until all risk factors no longer present or 3 consecutive negative MRSA screens obtained from all risk factors. <p>After three consecutive negative screen results and risk factor(s) remain then these should be screened for MRSA weekly</p>
8.	<p>Following transfer/discharge or ceasing isolation precautions patient equipment and environment require Amber clean in accordance with the Healthcare Environment Cleaning Policy and Procedures (B36/2010). http://insitetogether.xuhl-tr.nhs.uk/pag/pagdocuments/Cleaning%20-%20Healthcare%20Environment%20UHL%20Policy.pdf</p>
9.	<p>Patient Contacts: If the patient is in a bay, all patients in the bay will require MRSA Contact screening to identify if cross infection has occurred.</p> <p><u>High Risk category areas</u> (see table 1: section 5.1.2):</p> <ul style="list-style-type: none"> • Screen all risk factor sites (see number 2 above) <p><u>Intermediate and low risk category areas</u> (see table 1: section 5.1.2):</p> <ul style="list-style-type: none"> • Patients require nose and perineum including all risk factor sites

Table 2: Actions to be taken when MRSA is first identified for Elective patients prior to admission

	Action
1.	Inform the patient of the result and provide/offer an information leaflet on MRSA https://yourhealth.leicestershospitals.nhs.uk/library/corporate-nursing/infection-prevention/104-reducing-the-risk-of-mrsa-infection/file
2.	Provide topical suppression treatment and explain to the patient how to use the treatment and provide an information leaflet (see link below) <ul style="list-style-type: none"> • Daily antibacterial body wash (Stellisept) including hairline. When washing hair use Stellisept wash in addition to shampoo/conditioner • Nasal Mupirocin (Bactroban®) 2% ointment three times a day into each nostril https://yourhealth.leicestershospitals.nhs.uk/library/corporate-nursing/infection-prevention/140-how-to-use-antibacterial-wash-and-nasal-ointment-to-reduce-risk-of-infection
3.	If the patient has an infection (urine, wounds, sputum) discuss with microbiology medical staff
4.	Following topical suppression treatment (5 days if using Nasal Mupirocin (Bactroban®) 2% ointment) after 2 days/48 hours <u>repeat MRSA screen</u> including risk factor sites. <ul style="list-style-type: none"> • Three consecutive MRSA negative screens (nose, perineum and all risk factor sites) are required <u>Risk factors:</u> <ul style="list-style-type: none"> • Urine (if catheterised) • Sputum (if productive cough) • All areas of non-intact skin: wounds, ulcers, skin lesion, urostomy, PEG sites etc. • Screen all lines when able: including, CVAD, Vascath

Introduction

This appendix provides information for the care and management of all patients with a history of MRSA carriage. The table below provides information for their care and management.

Procedure for managing patients known to have MRSA carriage in-hospital	
	Action
1.	Follow the Infection Prevention MRSA Pathway or link below: http://insitetogether.xuhl-tr.nhs.uk/SP2007/Infection%20Prevention%20and%20control/(IPP%20MRSA)%20IPP%20Meta-cillin%202018%20v3.pdf
2.	All patients known to have MRSA carriage should be admitted into a single side room with Contact isolation precautions. <ul style="list-style-type: none"> Exception: <u>elective patient admission</u> with three consecutive negative MRSA screen results including risk factor(s) if present and the last screen taken within 18 weeks prior to admission. <p>(N.B. If the patient has been hospitalised within the 18 weeks following MRSA screening the results are null and void).</p> <p>If a single room is not available a risk assessment and datix form need to be completed.</p>
3	Following MRSA screen commence topical suppression treatment. Explain to the patient how to use and provide an information leaflet (see link below): <ul style="list-style-type: none"> Daily antibacterial body wash (Stellisept) including hairline. When washing hair use Stellisept wash in addition to shampoo/conditioner Nasal Mupirocin (Bactroban®) 2% ointment three times a day into each nostril https://yourhealth.leicestershospitals.nhs.uk/library/corporate-nursing/infection-prevention/140-how-to-use-antibacterial-wash-and-nasal-ointment-to-reduce-risk-of-infection
4.	If the patient is showing signs of systemic infection then discuss treatment with microbiology medical staff.

5. After receiving five days continuous suppression treatment (daily StelliSept wash and Nasal Mupirocin (Bactroban®) 2% ointment three times a day into each nostril

Ceasing Contact precautions:

A. No risk factor(s):

- Patients may be moved out of a single room if they have received five days of daily antibacterial washes and nasal ointment three times daily and does not have any risk factors
- All equipment removed from the room must be decontaminated (**Amber Clean**) before placing in the bay. Alternatively, move the patient and their belonging into a clean bed-space and request **Amber clean** for the side-room.

(Note: if the patient subsequently develops risk factors, follow B: patient with risk factors)

B. Patient with Risk Factor(s)

If a patient has one or more **risk factors** continue isolation precautions until all risk factors no longer present or 3 consecutive negative MRSA screens obtained from **all** risk factors.

Risk factors:

- Urine (if catheterised)
- Sputum (if productive cough)
- All areas of non-intact skin: wounds, ulcers, skin lesion, urostomy, PEG sites etc.
- Screen all lines when able: including, CVAD, Vascath

1. Identification of MRSA in Neonates

- 1.1. Babies on the neonatal unit are classified as high risk for MRSA. A blanket approach to treatment to minimise the risk of babies developing MRSA is not appropriate due to their skin development and maintaining the baby's body temperature. Babies are therefore screened on admission to the units and weekly on Monday's.
- 1.2. Babies identified as positive for MRSA will be alerted on patient centre and nerve centre by the infection prevention team. The neonatal team will update BadgerNet and identify the MRSA on the transfer or discharge letter generated from BadgerNet. The neonatal unit is responsible for putting an alert on the babies medical notes with Hazard Alert form placed inside the front cover and the alert label on the outside.

2. MRSA Screening

- 2.1. All patients will be screened within 6 hours of admission to the neonatal unit. In addition, patients from outside of Leicestershire will be isolated (contact precautions) in their cot / incubator space until a negative MRSA screen result is available.
- 2.2. The infection prevention pathway will be used.
- 2.3. The sites for screening for MRSA are:
 - Nose (one swab for both nostrils)
 - Perineum
 - All areas of non- intact skin (except peripheral cannula sites)
 - Urine (if catheterised)
 - Respiratory secretions if coughing or requiring suction

Swabs should be pre-moistened with sterile water or saline if the site to be screened is dry. This helps bacteria adhere to the swab.

3. Care and Management of Babies with MRSA

- 3.1 Babies with MRSA carriage see flow chart (appendix 4a)

3.2 Isolation Precautions

- 3.2.1 Babies identified with MRSA require contact isolation precautions. As there are no side rooms available on the neonatal units, patients will be nursed within the unit and contact isolation precautions will be taken around the patient zone.

3.3 Topical suppression treatment

- 3.3.1 Babies identified with MRSA will receive topical suppression treatment for 5 days. The current suppression regime is Octenisan antiseptic body wash and Nasal Mupirocin (Bactroban®) 2% ointment. Babies who suffer an adverse reaction to Octenisan should be discussed with the infection prevention team. In cases where treatment is inappropriate due to skin integrity or condition of the baby, treatment may be deferred until the clinical team deems it appropriate to treat the baby.
- 3.3.2 Where a baby with MRSA is a twin consider providing topical suppression treatment to the

twin also.

- 3.3.3 Consider treating the parents of babies identified with MRSA at the same time as the baby. The treatment should be prescribed on an outpatient prescription pad by the Consultant Neonatologist.
- 3.3.4 Once the baby has completed a 5 day course of treatment they should be taken off the treatment for 2 days and then re-screened for 3 consecutive days from the appropriate screening sites (see section 2.3 above).
- 3.3.5 Once baby has 3 consecutive negative MRSA screen results from all sites (see section 2.3 above), the baby can be moved to a clean cot or incubator and clean space then the contact isolation precautions can cease.
- 3.3.6 The environment (space) and equipment requires Amber clean in accordance with the UHL Healthcare Environment Cleaning Policy and Procedures (B36/2010). <http://insitetogether.xuhl-tr.nhs.uk/pag/pagdocuments/Cleaning%20-%20Healthcare%20Environment%20UHL%20Policy.pdf>
- 3.3.7 Where a baby's diagnosis of MRSA occurs less than 5 days before they are discharged then the baby must complete the 5 days suppression treatment at home.

3.4 Transfer/discharge

- 3.4.1 The movement of baby with MRSA between wards and departments will be kept to a minimum. When essential investigations or treatments are required, the receiving department must be notified in advance so that the same level of precautions can be maintained.
- 3.4.2 All healthcare facilities that accept babies with MRSA from UHL must be informed prior to the transfer taking place. All information must be documented in appropriate nursing and medical records.
- 3.4.3 The ambulance service must be informed at time of booking if a known MRSA positive baby needs to use ambulance transport so that transportation with patients susceptible to infection may be avoided.
- 3.4.4 The handling of deceased babies is the same as any other patient; lesions should be covered. Body bags are unnecessary unless required as standard precautions as with any other deceased baby (Care of Deceased Patient Policy) <http://insitetogether.xuhl-tr.nhs.uk/pag/pagdocuments/Last%20Offices%20Care%20of%20the%20Deceased%20UHL%20Policy.pdf>

4 Management of babies who have parents that are known to be MRSA positive

- 4.1 Provide parents with topical suppression treatment (daily Stellisept washes and nasal Mupirocin (Bactroban®) 2% ointment). Mothers that remain an inpatient continue suppression treatment for duration of their hospital stay see appendix 2/3.
- 4.2 Consider treatment for the baby with octenisan antiseptic body wash and nasal Mupirocin (Bactroban®) 2% ointment in accordance with section 3.3.4 above.

Appendix 4a – MRSA Policy in Neonates

- On admission (within 6 hours) all babies to be screened for MRSA
- Babies transferred from a unit outside of Leicestershire, contact isolation precautions are required until the baby has a negative MRSA result



- All babies on NNU should be screened weekly on a Monday morning for MRSA



- On identification of MRSA contact isolation precautions required in the baby's zone
- Complete 5 days topical suppression treatment
- Then stop for 2 days
- Rescreen all sites (see section 2.3 above) for the next 3 consecutive days, unless positive MRSA result



- If all 3 consecutive MRSA screen results are negative contact isolation precautions can cease
- Move baby into a clean incubator/cot
- Amber clean the environment and equipment in accordance with the Healthcare Environment Cleaning Policy and Procedure (B36/2010)
- The baby resumes weekly MRSA screening



- If the baby remains MRSA positive continue contact isolation precautions
- Consider another course of topical suppression treatment and treating the parents



- Once baby is transferred/discharged, environment and equipment require Amber clean in accordance with UHL Healthcare Environment Cleaning Policy and Procedures (B36/2010)