Infection Prevention Policy
Control and Prevention of Methicillin Resistant Staphylococcus Aureus (MRSA)

Executive Summary

This policy aims to provide all clinical staff with the relevant information required to prevent, control and manage the incidence and spread of Methicillin Resistant Staphylococcus aureus (MRSA) for patients in hospital or where there is a plan to admit to hospital.
**Version History Log**

This area should detail the version history for this document. It should detail the key elements of the changes to the versions.

<table>
<thead>
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<th>Date Approved</th>
<th>Version Author</th>
<th>Status &amp; location held</th>
<th>Details of significant changes</th>
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| 3       | Pending HIPCC consultation. Circulated to Committee on 25.03.09 | Infection Prevention Team | York Hospital | Into Trust Format  
Addition of Throat as a site to be actively screened  
Treatment Procedure  
EDN Notification  
Elective Screening Pathway  
Renal Dialysis Programme  
Route Cause Analysis procedure for cases of Bacteraemia  
Appendices |
| 4       | July 2011 HIPC | Infection Prevention Team | York Hospital | Revised presentation  
Changes to screening |
| 5       | November 2011 | Infection Prevention Team | York Hospital | Changes to suppression therapy |
| 6       | November 2012 | Infection Prevention Team | York Hospital | Revised presentation  
Revised to include Scarborough sites  
Revised flow chart for MRSA elective risk assessment |

Name of policy: Methicillin Resistant *Staphylococcus aureus* (MRSA)

Version Number: 6

Issue Date: November 2012
| Changes to preadmission MRSA screening exclusion list for ophthalmology patients |
| Paediatric admissions will be risk assessed and screened as per adult management |
| Changes to number of screens required post admission for acute admissions |
| Changes to enhanced screening - ICU/HDU, pre-insertion of central line, patients in hospital for more than 30 days |
| Isolation for previously MRSA positive patients |
| Prophylactic antibiotic cover in catheterisation |
| Neonate treatment added |
| Changes to high risk surgery list |
| Revised door notice |

Name of policy: Methicillin Resistant *Staphylococcus aureus* (MRSA)

Version Number: 6

Issue Date: November 2012
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1 Introduction & Scope

This policy aims to provide all clinical staff with the relevant information required to prevent, control and manage the incidence and spread of Methicillin Resistant Staphylococcus aureus (MRSA) for patients in hospital or where there is a plan to admit to hospital.

2 Definitions

MRSA is a strain of Staphylococcus aureus that is resistant to a large group of antibiotics called the beta-lactams, which include the penicillins and the cephalosporins.

Colonisation is the presence of micro-organisms without tissue invasion.

Infection is the presence of micro-organisms causing a host response such as elevated temperature.

MRSA bacteraemia - when MRSA is present in the bloodstream.

Root Cause Analysis (RCA) is the process used to investigate the cause of an MRSA bacteraemia.

3 Policy Statement

MRSA remains endemic in many UK hospitals. Specific guidelines for control and prevention are justified as MRSA causes serious illness and results in significant additional healthcare costs. Although the majority of patients who acquire MRSA are colonized, not ill and do not require antibiotic therapy, a proportion of patients develop infection, including invasive infection, which may result in death.

4 Equality Impact Assessment

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are placed at an unreasonable or unfair disadvantage over others.
5 Accountability

All healthcare professionals and volunteers are responsible and accountable to the Chief Executive for the correct implementation of this policy.

Professional staff are accountable according to their professional code of conduct.

6 Consultation, Assurance and Approval Process

6.1 Consultation Process

Consultation was undertaken through the Hospital Infection Prevention Committee (HIPC) and Clinical Quality and Safety.

6.2 Quality Assurance Process

Following consultation with and endorsement of the Hospital Infection Prevention Committee, this policy has been reviewed by the Trust’s Quality Assurance group to ensure it meets the NHSLA standards for the production of procedural documents.

6.3 Approval Process

Following completion of the Quality Assurance Process, this policy, and any subsequent policy revisions will require the approval of the Hospital Infection Prevention Committee.

7 Review and Revision Arrangements

7.1 Process for Reviewing a Procedural Document

The review of the document will be undertaken with the collaboration of all parties involved in 2 years or earlier if there are changes in recommended practice or legislation.
8 Dissemination, Implementation and Training

8.1 Dissemination

Once approved previous electronic versions of this document will be archived accordingly on the Trust’s electronic portal Horizon, and the Laboratory Medicine Quality Manual Q Pulse. The current version of the document will be published on the above sites. Information related to the latest version of the document will be available from Infection Prevention Department and Trust wide information i.e. team brief, acknowledge alerts on Q pulse and training. This policy will be made available to service users and the public, on request, and in the format requested.

This policy is available in alternative formats, such as Braille or large font, on request to the author of the policy.

The Policy will be disseminated through the Consultants; Clinical Directors; Directorate Manager; Matrons; and Ward Managers via emails and meetings.

8.2 Implementation of Procedural Documents

Implementation will be managed by Infection Prevention Team, Matrons and Ward Managers. Audit of this will be as outlined in Section 10.1.

8.3 Training

Any training requirements identified within this policy are outlined within the personal training profiles accessed through horizon. Staff will be required to create their personal profile and agree up-take of this training with their line manager.

The process for following up staff who fail to attend mandatory training is as identified within the Training Identification Policy.
9 Document Control including Archiving Arrangements

9.1 Register/Library of Procedural Documents

This policy will be stored on the Trust’s electronic portal, Horizon, on the policies and procedures site and will be stored both in an alphabetical list as well as being accessible through the portal’s search facility.

9.2 Archiving Arrangements

On review of this policy, archived copies of previous versions will be automatically held on the version history section of each policy document on Horizon. It is the responsibility of the Publisher(s) to ensure that version history is maintained on Horizon.

9.3 Process for Retrieving Archived Documents

To retrieve a former version of this policy from Horizon, the Compliance Unit should be contacted.

10 Monitoring Compliance With and the Effectiveness of Policies

This policy will be monitored for compliance with the minimum requirements outlined below as outlined in the NHSLA Risk Management Standards 2.4.9. and Hygiene Code Criterion 4, 5, 7 and 9.

10.1 Process for Monitoring Compliance and Effectiveness

This policy will be monitored through the infection prevention team strategy for the auditing of infection prevention policies as required by the Hygiene Code 2009, Criterion 2.

Monitoring of the policy will also be undertaken via the adverse incident reporting system.
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<th>Responsibility for monitoring</th>
<th>Frequency</th>
<th>Reported to</th>
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<td>CLAD</td>
<td>Annual Statutory and Mandatory training</td>
<td>Directorate/ Division leads via CLAD and ESR</td>
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<td>b. Training</td>
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<td>Annual Statutory and Mandatory training</td>
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<td>d. Enhanced screening checks</td>
<td>Spot check audits by IPT using CPD data, laboratory database</td>
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<td>Rolling programme of checks – minimum annually</td>
<td>Directorate/ Division responsible where issues raised</td>
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<td>Minimum Requirements</td>
<td>Monitoring</td>
<td>Responsibility for monitoring</td>
<td>Frequency</td>
<td>Reported to</td>
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<tr>
<td>e. Isolation</td>
<td>IPT documentation records. CPD whiteboard records. IPN Clinical Support Visits</td>
<td>IPT with Systems and Network</td>
<td>Spot checks and clinical IPT visits</td>
<td>Directorates/Division where issues raised</td>
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<td>IPT audit</td>
<td>IPT</td>
<td>Bi-annual audit</td>
<td>Directorates/Division, DIPC</td>
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<tr>
<td>g. Root Cause Analysis for MRSA bacteraemia</td>
<td>IPT and Directorate/ Division records Action plans</td>
<td>IPT and Directorate/ Division management teams</td>
<td>By case</td>
<td>Exec board.</td>
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<td>Core Patient Database AIRs forms</td>
<td>IPT</td>
<td>Two yearly checks of randomly selected cases</td>
<td>IPT</td>
</tr>
<tr>
<td>Minimum Requirements</td>
<td>Monitoring</td>
<td>Responsibility for monitoring</td>
<td>Frequency</td>
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<tr>
<td>i. Data statistics</td>
<td>CPD data, laboratory database</td>
<td>IPT</td>
<td>Monthly</td>
<td>Ward, Directorate and Trust via Q drive (York) Divisional dashboards (Scarborough) MRSA bacteraemia reported on Signal by Directorate/ Division</td>
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<tr>
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<td>AIRs forms</td>
<td>IPT</td>
<td>Two yearly checks of randomly selected cases</td>
<td>IPT</td>
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Methicillin Resistant *Staphylococcus aureus* (MRSA)

Version Number: 6

Issue Date: November 2012
10.2 Standards/Key Performance Indicators

National MRSA Standards and guidelines

National Specifications for Cleanliness in the NHS (National Patient Safety Agency)

IP performance dashboards – key performance indicators within this process (i.e. incidence and prevalence)

Department of Health Saving Lives – High Impact Intervention No. 8

11 Trust Associated Documentation

Related Trust policies on Horizon:

YHFT Policy for the Development and Management of Policies CORP.RL.10
YHFT [CLIN.IC.12] Infection Prevention Hand Hygiene Policy
YHFT [CLIN.IC.6] Infection Prevention Standard Precautions Policy
YHFT [CLIN.IC19] Infection Prevention Policy for the Decontamination of Reusable Communal Equipment and the Environment
YHFT [CLIN.IC8] Infection Prevention Isolation Policy
YHFT [CLIN.IC9] Laundry Policy
YHFT [GL.CLIN.CLIN3] Antimicrobial Formularies
YHFT [] Outbreak policy
YHFT [] Waste Management Policy

12 References

1. Guidelines for the control and prevention of Methicillin-resistant \textit{Staphylococcus aureus} (MRSA) infection in healthcare facilities, \textit{Journal of Hospital Infection, May 2006 Supplement 1; Vol.63}


3. \textit{MRSA Screening – Operational Guidance, DH. 31.12.08.}
## Appendices

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Appendix 1 – MRSA elective risk assessment and management for adults and children (including suppression therapy if patient to be admitted within 7 days)

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Areas to be screened</th>
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</thead>
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<tr>
<td>High Risk</td>
<td></td>
</tr>
<tr>
<td>• High risk surgery (Appendix 10)</td>
<td>• Nose</td>
</tr>
<tr>
<td>• Resident of care facility</td>
<td>• Throat</td>
</tr>
<tr>
<td>• Hospital inpatient within last 12 months</td>
<td>• Groin or Axilla</td>
</tr>
<tr>
<td>• Previously MRSA positive</td>
<td>• Wounds/Lesions</td>
</tr>
<tr>
<td>• Employed in a care profession</td>
<td>• Sites of invasive devices</td>
</tr>
<tr>
<td>• Any chronic wounds</td>
<td>• CSU if catheterised.</td>
</tr>
<tr>
<td>• Long term invasive devices</td>
<td>• Any previous positive site</td>
</tr>
<tr>
<td>Low Risk</td>
<td>Nose Swab</td>
</tr>
<tr>
<td>Does not fit above criteria</td>
<td></td>
</tr>
</tbody>
</table>

Decision to admit is made, patient is risk assessed by clinic staff and screened as above for MRSA – for excluded patients see Appendix 2

If the patient is positive for MRSA

Patient and clinicians informed by IPT

Admit to side room

Negative for MRSA

– No further action

Clinician to make decision regarding proceeding with surgery/procedure

Discuss antimicrobial prophylaxis with microbiologists

MRSA suppression therapy issued (see Appendix 9)
Appendix 2 – adult patients excluded from elective screening

- Day case ophthalmology – except where patient fits category for high risk for MRSA (see Appendix 1)
- Day case dental
- Day case endoscopy
- Day case ERCP
- Minor dermatology procedures, e.g., warts or other liquid nitrogen applications, Excision of skin lesion under local anaesthetic
- Minor procedures such as arthroscopies, lumbar puncture, joint injections or minor hand surgery such as carpal tunnel decompression
- Patients who are not receiving any medical or surgical treatment – e.g. those in respite care, or day cases attending for pain management therapy, and attendances for clinical immunology
- Medical terminations of pregnancies
- Radiological patients
- Day case cystoscopy
- Hysteroscopy, colposcopy, cone biopsy and vulval biopsy.
- IUD removal
- HRT implant
- Early miscarriages where patient is low risk
- Diathermy of gynaecological warts
- Removal of ‘reveal’ device
- Urodynamic assessment

This is not an exhaustive list. If in doubt please contact IPT for advice.
Appendix 3 – Maternity admissions

MRSA Screening of Mother in Maternity Admissions

A) High risk of mother carrying MRSA:
- MRSA in last 10 years
- Employed in a caring profession
- Hospital inpatient within last 12 months

B) Caesareans
- Elective caesarean: Screen at time of booking operation
- Emergency Caesarean: Screen at time of decision (or as close as possible)

C) High risk of complications for mother (e.g. diabetic, multiple births)
Screen when complications become known

D) High risk of complications or potential complications with baby, (e.g. likely to need SCBU, NICU because of size or known complications or risk factors.)
Screen when complications become known

1) Fits Criteria A:
Needs FULL MRSA Screen:
-Nose
-Groin or Axilla
-Throat
-Chronic Wounds
- Site of invasive device
- CSU if catheterised
- Any previously positive site

2) Fits criteria B, C or D but NOT A =
- Nose swab only

3) Does not fit criteria A, B, C, or D =
- No MRSA screen required.

Positive result = IPT to arrange MRSA suppression therapy
Negative result = no further treatment required.
### Appendix 4 – Acute (Non-elective) admission process – for adults and children

**MRSA Risk Assessment Screen for Acute Admissions**

<table>
<thead>
<tr>
<th>High Risk</th>
<th>Low risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse in side room</td>
<td>Nurse in side room</td>
</tr>
<tr>
<td>MRSA within the last 10 years</td>
<td>Any chronic wounds</td>
</tr>
<tr>
<td>Resident of a care facility</td>
<td>Hospital inpatient within the last 12 months</td>
</tr>
<tr>
<td></td>
<td>Long term invasive device</td>
</tr>
<tr>
<td></td>
<td>Employed in a caring profession</td>
</tr>
</tbody>
</table>

**High Risk**
If any of the above ticked screen:
- Nose
- Throat
- Groin/ axilla
- Wounds/ lesions
- Sites of invasive devices
- CSU if catheterised
- Chlorhexidine wipes issues

**Low Risk**
If none of the above ticked screen:
- Nose

---

**ED or admitting ward to complete risk assessment and screening (see above).**
Optimum within 2 hours of arrival.

**High Risk**
Chlorhexidine wash cloths must be used **daily** from admission until screening results known.
Document use

**Previously MRSA positive**
Patient **must** be nursed in side room
If SR not available risk assess and discuss with IPT. Document and complete an AIRS form

**High Risk but not previous MRSA positive**
Patient may be placed in main bay.

**If MRSA negative**
No further action

**If MRSA positive**
Isolate patient if not already in side room. Commence full suppression treatment ([Appendix 8](#))

**If MRSA negative**
Discuss with IPT.
No treatment required.
Follow policy for enhanced screening ([Appendix 5](#))
Appendix 5 – Enhanced screening

Enhanced screening enables early detection, isolation and treatment in highly susceptible/vulnerable patients.

Patients who are found to be MRSA positive will require isolation (Appendix 6) and suppression therapy treatment (Appendix 8).

<table>
<thead>
<tr>
<th>Enhanced MRSA screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient group</strong></td>
</tr>
<tr>
<td>Contacts of known MRSA positive case (i.e. patients in the same bay)</td>
</tr>
<tr>
<td>ICU/ HDU</td>
</tr>
<tr>
<td>Transfers from other hospitals</td>
</tr>
<tr>
<td>Pre-surgery where the patient is having high risk surgery (Appendix 10) or high risk of MRSA • Resident of care facility • Inpatient in last 12 months • Previous MRSA positive • Employed in a care profession • Patients with chronic wounds • Patients with invasive devices</td>
</tr>
</tbody>
</table>
### Enhanced MRSA screening continued

<table>
<thead>
<tr>
<th>Patient group</th>
<th>When to carry out screening</th>
<th>Sites to be screened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Elective Suite (MES York) admissions</td>
<td>• 18 weekly where the patient has recurring admissions</td>
<td></td>
</tr>
</tbody>
</table>
| Haematology/ Oncology patients | • On admission and discharge to Ward 31  
• 18 weekly where patient attends MES (York) or Haematology/ Oncology clinic for treatment | Nose  
Throat  
Perineum or groin or axilla  
Wound swabs  
Invasive devices sites  
Catheter Specimen of Urine if catheterised  
Sputum if clinically indicated  
Umbilicus in neonates  
Previously positive sites |
| Renal Dialysis Units (including satellite units)  
Refer to renal patient MRSA/MSSA management protocol for more information | • On entering renal dialysis programme  
• 3 monthly screens  
• Transfers between units to be screened on return to usual dialysis unit (where the transfer has been for more than one session)  
• Inpatients (for more than 24 hours) to be screened on the first dialysis after discharge  
• Refer to renal patient management protocol for patients with lines |  |
<p>| Patients in hospital for more than 30 days | • On day 30 of hospital inpatient stay and multiples of 30 days thereafter |  |
| Pre insertion of central line | • 7 days prior to insertion – where this is not possible screen as soon as possible and document in patient’s notes. |  |
| Pre insertion of Pacemaker |  |  |
| Pre insertion of PEG |  |  |</p>
<table>
<thead>
<tr>
<th>Patient group</th>
<th>When to carry out screening</th>
<th>Sites to be screened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical indication of infection</td>
<td>• Where the patient has clinical signs of infection at a wound site, invasive device site, respiratory infection, UTI, sepsis</td>
<td>Take specimen from the infected site</td>
</tr>
</tbody>
</table>
Appendix 6 - Isolation

MRSA positive inpatients

Emergency admission patients known to be previously positive – may move out of single room if 1 MRSA screen result is negative

These cases must be discussed with IPT

Previously positive MRSA patients admitted for elective procedures before preadmission screen results are known must be isolated – may move out of SR if screen is subsequently negative

Patients transferred from other hospitals may move out of single room if 1 MRSA screen result is negative

- Single room required.
- If none available refer patient to bed management team
- Several patients with MRSA may be co-horted in the same bay – after discussion with IPT.

The door must be kept closed.

There is increased risk where patients are MRSA positive in their sputum, or are heavy skin shedders (i.e. psoriasis/eczema).

‘Standard and Contact Precautions’ door notice (Appendix 16) must be displayed and advice followed
Appendix 7a – Treatment for MRSA infection including bacteraemia

MRSA infection, like any strain of *Staphylococcus aureus*, can range from wound infection to the less common but serious endocarditis, osteomyelitis, pneumonia and bloodstream infection.

The Medical Microbiologist must be contacted regarding appropriate antibiotic therapy and advice documented in the patient’s notes.

Appendix 7b – Prophylactic antibiotic regimes

Prophylactic antibiotic regimes for implant and vascular graft surgery should be modified to include Vancomycin, Teicoplanin or as advised by Medical Microbiologist. This must be discussed with a Medical Microbiologist and advice documented in the patient’s notes.

Appendix 7c - Wound site treatment

Where MRSA is present in a wound an antibiotic regime may need to be considered and prescribed – discuss with Medical Microbiologist and document in patient’s notes.

The Tissue Viability Nurse or dermatology must be contacted for advice regarding wounds infected or colonised with MRSA. The podiatrist should be contacted for advice if the wound is below the ankle.

Appendix 7d – Prophylactic antibiotics prior to urinary catheterisation

Patients who are MRSA positive in their urine and who need a urinary catheter insertion or re-insertion require prophylactic antibiotic cover such as Gentamycin – discuss with Medical Microbiologist and document in patient’s notes.
Appendix 8 - Suppression therapy treatments including advice if patient has allergy or reaction to products

- The aim of suppression therapy is to reduce bacterial load on the skin and attempt to eradicate MRSA carriage.
- When the patient does not fit any criteria contact IPT
- Where the patient is known to have, or develops a reaction to any product contact IPT for advice.
- If the patient is resistant to any product IPT will advise

Appendix 8a – patients over 1 year without dermatology problems or chronic wounds

| Suppression therapy – patients over 1 year old without dermatology problems or chronic wounds |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| **Product**                                    | **Frequency**                                 | **Method of application**                      |
|                                               | **Throat not colonised**                      | **Throat colonised**                           |
| Hibiscrub with 4% chlorhexidine               | Daily for 5 days                              | Daily for 14 days                             |
|                                               | Topical wash (skin contact time = one minute) |
| Mupiricin 2% nasal ointment (eg Bactroban)    | Three times daily for 5 days                  | Three times daily for 14 days                 |
|                                               | Topical nasal application – to anterior nostrils |
| Chlorhexidine gluconate 0.2% mouth gargle (where patient able) | Not required | 3 times daily for 14 days |
|                                               | Use as mouth and throat gargle                |
| Hibiscrub with 4% chlorhexidine               | Twice weekly                                  | Hair wash                                     |

Methicillin Resistant *Staphylococcus aureus* (MRSA)
Appendix 8b – Suppression therapy treatment for dermatology patients and patients with chronic wounds over 1 year who can go in bath*

<table>
<thead>
<tr>
<th>Product</th>
<th>Frequency</th>
<th>Method of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% Triclosan (eg Oilatum plus) or Octenidine Dihydrochloride 0.3% (eg Octenisan)</td>
<td>Throat not colonised: Daily for 5 days</td>
<td>Oilatum plus - add to bath (10mls/1 capful to 10cms water) Octenisan – use as topical wash (skin contact time = 3 minutes) Irrigate wound where possible</td>
</tr>
<tr>
<td></td>
<td>Throat colonised: Daily for 14 days</td>
<td></td>
</tr>
<tr>
<td>Mupiricin 2% nasal ointment (eg Bactroban)</td>
<td>Three times daily for 5 days</td>
<td>Topical nasal application – to anterior nostrils</td>
</tr>
<tr>
<td>Chlorhexidine gluconate 0.2% mouth gargle (where patient able)</td>
<td>Not required</td>
<td>Use as mouth and throat gargle</td>
</tr>
<tr>
<td></td>
<td>Three times daily for 14 days</td>
<td></td>
</tr>
<tr>
<td>Hibiscrub with 4% chlorhexidine or Octenidine Dihydrochloride (eg Octenisan)</td>
<td>Twice weekly</td>
<td>Hair wash</td>
</tr>
</tbody>
</table>

*Where the patient cannot go in bath – dilute 1.5ml Oilatum plus into a bowl of water, or use Octenisan as topical wash onto flannel - ensure full body wash.
Appendix 8c – Suppression therapy treatment for children less than 1 year old (but over 28 weeks’ gestation). For babies under 28 weeks’ gestation – contact microbiologists for advice.

### Suppression therapy for children less than 1 year old (but over 28 weeks’ gestation)

<table>
<thead>
<tr>
<th>Product</th>
<th>Frequency</th>
<th>Method of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mupiricin 2% nasal ointment (eg Bactroban)</td>
<td>Three times daily for 5 days</td>
<td>Topical nasal application – to anterior nostrils</td>
</tr>
<tr>
<td>Octenidine Dihydrochloride</td>
<td>Daily for 5 days</td>
<td>Topical all over body wash (skin contact time = 3 minutes)</td>
</tr>
<tr>
<td></td>
<td>Twice weekly</td>
<td>Hair wash</td>
</tr>
</tbody>
</table>

Appendix 8d – Suppression therapy treatment for pregnant women during their first trimester

### Suppression therapy for pregnant women in their first trimester

<table>
<thead>
<tr>
<th>Product</th>
<th>Frequency</th>
<th>Method of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorhexidine hydrochloride 0.1% with neomycin sulphate 0.5% (Naseptin)</td>
<td>Three times daily for 5 days</td>
<td>Topical nasal application – to anterior nostrils</td>
</tr>
<tr>
<td>Hibiscrub with 4% chlorhexidine</td>
<td>Daily for 5 days</td>
<td>Topical wash – shower, bath, strip wash (skin contact time = 1 minute)</td>
</tr>
<tr>
<td></td>
<td>Twice weekly</td>
<td>Hair wash</td>
</tr>
</tbody>
</table>
Appendix 9 - Suppression therapy regime for all patients

Pre admission MRSA positive result
(where the patient’s admission is planned more than 7 days from decision to admit)
Aim to complete treatment on day of admission

If the patient is known to have, or develops a reaction to any product contact IPT for advice.

Inpatient MRSA positive result
Full screen required prior to starting first therapy regime

Suppression Therapy Regime (1st)
Full Treatment (see Appendix 8)
Stop treatment for 2 days
Full re-screen
Await results
Do not restart treatment

Positive result

Suppression Therapy Regime (2nd)
Full Treatment (see Appendix 8)
Stop treatment for 2 days
Full re-screen
Await results
Remain in side room

Positive result

Negative result [1]
Remain off treatment
Further full re-screen after 7 days
Await results
Remain in side room

Negative result [1]
Remain off treatment
Full re-screen after 7 days
Await results
Remain in side room

Negative result [2]

Patient can move out of side room following discussion with IPT

IPT will advise

Inpatient MRSA positive result

Methicillin Resistant Staphylococcus aureus (MRSA)
Appendix 10 – High risk surgery list

- Any surgery if the surgery is deemed high risk by the surgeon
- Any patient likely to need transfer to ICU/ HDU
- Any orthopaedic surgery requiring prosthesis
- Any vascular surgery requiring grafts
- Abdominal Aortic Aneurysm
- All colectomy surgery
- Amputation of limb
- Anterior Resection
- AP Resection
- Hartmann’s procedure
- Laryngectomy
- Neck dissections
- Nephrectomy
- Partial/total glossectomy
- Pec major flap
- Pyeloplasty
- Radial forearm free flaps
- Roux-en-y
- Tracheostomy
Appendix 11 – Root Cause Analysis (RCA) Process

MRSA bacteraemia confirmed by laboratory and IPT informed

Day of notification or first working day

IPT email matron, consultant, ward manager, pharmacy representative, directorate manager and clinical director to request RCA.
RCA lead agreed within directorate

Within 2 working days

RCA lead conducts rapid review, identifies and informs RCA team.
Where necessary RCA lead to allocate data gathering to other team members as appropriate.
RCA lead sends meeting invitations to team.

Within 5 working days

RCA team meet formally to discuss data findings and key issues, and establish root cause.
Action plan points agreed and assigned.

Within 8 working days

RCA lead writes report and action plan and sends to RCA team for approval. Any changes to be agreed by all team members.

Within 1 month

Clinical director to present RCA findings and actions to Executive Board

The team must be quorate. If not achieved reschedule within 3 days; a further cancellation will be reported to the executive board for action (* must attend):
- Clinician (or senior representative) at time of infection (Acute and/or PCT) *
- Clinical microbiologist *
- Nursing staff (Acute and/or PCT) *
- Matron *
- Infection Prevention Nurses (Acute and/or PCT) *
- Pharmacist *
- Specialist nurses if appropriate
- Risk management if appropriate

Progress of actions to be monitored by RCA lead and shared with IPT.
Any failure to comply with the process will be flagged with the responsible directorate.
Where the directorate fail to act a failure to comply will be flagged with the DIPC.

Issue Date: November 2012
Appendix 12 - Documentation and electronic ‘flagging’

Wards are provided with MRSA documentation packs. The Infection Prevention Team (IPT) will replace packs as required. The pack contains:

- MRSA management plan to be placed in medical notes
- MRSA – Information for patients leaflet
- 5 day suppression therapy sticker for drug chart – this requires a doctor’s signature. 14 day courses must be prescribed by medical staff.

All new cases of MRSA identified via microbiology reports will be ‘flagged’ by the IPT via Core Patient Database (CPD) to alert staff that patients need isolation and screening on all future admissions.

IPT will request a side room on CPD – the instructions regarding this are visible on the white board.

Appendix 13 - Data Statistics

The IPT will maintain data of MRSA prevalence and incidence of MRSA cases. This data will be fed back monthly to directorates/divisions via the Q drive (York) and Divisional dashboard (Scarborough).

MRSA bacteraemia will be reported by Directorate/Division on Signal.
The registered nurse in charge of this patient is responsible for issuing MRSA suppression therapy, and dissemination of information regarding care and management:

**Screening and treatment:**

Please screen the following sites before starting treatment and at rescreen (tick boxes applicable):

- [ ] nose
- [ ] throat
- [ ] groin or axilla
- [ ] invasive devices (chronic and acute)
- [ ] wounds/lesions
- [ ] CSU if catheterised
- [ ] sputum if expectorating
- [ ] Any previously positive site

*After signing by doctor, follow suppression therapy regime as per prescription chart.*

Screen contacts in same bay:

- [ ] nose
- [ ] invasive devices
- [ ] wounds
- [ ] CSU if catheterised

**Infection prevention precautions:**

- Ensure ‘Standard and Contact Precautions’ door notice is displayed. Please refer to door notice for full instructions.
- Change linen daily – bed sheets, bed clothes, towel and flannel.
- Nurse in a single room. If this is not available inform bed managers and Infection Prevention Team for advice.
- When possible allocate reusable equipment for individual patient use throughout patient episode. Clean in between use with Clinell wipes.
- When transferring a patient to another area or care facility advise the receiving department of the patient’s MRSA status. Patients must not be refused treatment, investigations or therapy.
On discharge to another health care facility the nurse in charge of the patient’s care must complete an Inter-Healthcare Transfer Form which will inform the receiving health care provider of the patient’s MRSA status.

For further advice contact the Infection Prevention Team on: 01904 - 7725860 (York), 01723 -7712395 (Scarborough). On-call is available through switchboard.
Appendix 15 - Equipment and Environmental Control Measures

- All areas require an environmental daily clean using the microfibre system (York), mop system (Scarborough). Enhanced cleaning may be required during clusters/outbreaks of MRSA. The IPT will advise.

- Rooms require cleaning with the microfibre system (York), mop system (Scarborough) on discharge, transfer or relocation of patients before being occupied by another patient.

- The IPT will advise if curtain changes are required e.g. following clusters or outbreaks.

- Separate clinical equipment must be designated for MRSA patients whenever possible. If these are not single use they must be cleaned using Clinell wipes before use on another patient.

- Linen must be sent to the laundry as infected by placing in a red hot water soluble bag inside a red outer bag.

- Patients with MRSA should be included in the observations of the Saving Lives High Impact Intervention 8 – Cleaning clinical equipment (patients with HCAI) version.
<table>
<thead>
<tr>
<th>Single Room</th>
<th>Door must be kept closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitors</td>
<td>Visitors must report to the nurse in charge before entering the room</td>
</tr>
<tr>
<td>Documentation</td>
<td>Must be kept outside room</td>
</tr>
<tr>
<td>Aprons and Gloves</td>
<td>Must be worn if there is a risk of contamination from blood or bodily fluids</td>
</tr>
<tr>
<td>Waste</td>
<td>Dispose of in room as clinical waste</td>
</tr>
<tr>
<td>Linen</td>
<td>Dispose of by placing in water soluble bag then into an outer red plastic bag</td>
</tr>
<tr>
<td>Hands</td>
<td>Effective hand hygiene before and after contact with patient</td>
</tr>
<tr>
<td>Cleaning York</td>
<td>With micro-fibre and neutral detergent. Patient equipment i.e. commodes and bedpans to be cleaned with green Clinell wipes</td>
</tr>
<tr>
<td>Scarborough</td>
<td>With disposable cloths and neutral detergent. Patient equipment i.e. commodes to be cleaned with green Clinell wipes</td>
</tr>
</tbody>
</table>
Appendix 17 - Visits to Other Departments

The presence of MRSA must not compromise care or patient safety. Prior arrangements need to be made by the nurse in charge of the patient with senior staff of the receiving department so that infection prevention measures can be implemented. The receiving department must adhere to standard precautions and environmental control measures.

In addition:

• Place patients at the end of the list/session whenever possible

• Patients should spend the minimum time in the department, being sent for when the department is ready.

• Equipment and attending staff should be kept to a minimum to reduce the risk of transmission and the amount of equipment requiring cleaning.

• Theatres
  o Recover patient in isolation, where facilities not available recover in theatre
  o Theatres should be left empty for a minimum of 15 minutes following cleaning to allow full cycle of air change.
Appendix 18 - Patient discharge including transfer to another hospital

- Discharge planning/assessment must not be delayed because of MRSA. Best practice requires that visits by staff providing this service should be last of the day whenever possible.

- Inform receiving hospitals, General Practitioners and other healthcare agencies of continuing care requirements and control measures. Complete an Electronic Discharge Notification (EDN) /Discharge letter/ inter-healthcare transfer form (IHTF) – place a copy of the IHTF in the patient's notes.

- Carriage of MRSA is not a contraindication to the transfer of a patient to a nursing or convalescent home.

- Inter-hospital transfers for clinical reasons should not be prevented.

- Ambulance Transportation

  Patients may be transported with others in the same ambulance without any special precautions except:
  - Inter hospital transfers when the patient has been and/or is going into isolation
  - When they are accompanying patients with invasive devices
  - When they are accompanying patients who are immunocompromised or neutropenic.

Appendix 19 - Deceased Patients

The infection control precautions for handling deceased patients are the same as those used in life. Body bags are not required.