

<b>CARING FOR MULTI- RESISTANT ACINETOBACTER (MRAB) PATIENTS</b>	<b>Clinical Guidelines</b> <b>Register No: 08004</b> <b>Status: Public</b>
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<b>Consulted With:</b>	<b>Individual/Body:</b>	<b>Date:</b>
	Infection Prevention Nurses	October 2017
Infection Prevention and Control Group	Infection Prevention and control Group	October 2017
Lyn Hinton	Director of Nursing	October 2017
Marcus Milner	Lead Biomedical Scientist	October 2017
Ellie Making	Chief Medical Officer	October 2017
<b>Professionally Approved By</b>	Dr Louise Teare	October 2017

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Author/Contact for Information	Nicola Gibson, Infection Prevention Nurse
Policy to be followed by (target staff)	All MEHT staff
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Related Trust Policies (to be read in conjunction with)	04072 Hand Hygiene Policy 08021 Linen Policy 08029 Isolation Policy 09033 Cleaning Policy 10006 Bed Management COP 11001 Mental Capacity Act 2005 Policy 04088 Waste management policy 04077 Outbreak policy 09038 Water Quality Policy 11040 Infection Prevention: Care of the Deceased

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## **1.0 Purpose**

1.1 The purpose of the guideline is:

- To minimise the risk to patients and staff by identifying and containing the spread of multi-resistant infection;
- To set out infection prevention precautions for the management of infected patient so as to prevent the spread of infection.

## **2.0 Scope**

2.1 This Policy applies to all staff employed by the Trust on a substantive and temporary basis.

## **3.0 Equality and Diversity**

3.1 Mid Essex Hospital Services NHS Trust is committed to the provision of a service that is fair, accessible and meets the needs of all individuals.

## **4.0 Roles and Responsibilities**

### **4.1 Managing Director**

- The Managing Director has overall responsibility for ensuring that the Trust has the necessary management systems in place to enable the effective implementation of this Policy and overall responsibility for the health and safety of staff, patients and visitors.

### **4.2 Director of Nursing**

- The Director of Nursing has strategic responsibility for ensuring systems are in place to facilitate the nursing staff's awareness of this Policy and appropriate support is given to enable staff in delivering practice as outlined in this guideline.

### **4.3 Medical Director**

- The Medical Officer has strategic responsibility for ensuring systems are in place to facilitate awareness of this guideline and to ensure that appropriate support is given to enable medical staff in delivering practice as outlined in this guideline.

### **4.3 Director of Infection Prevention and Control (DIPC)**

4.3.1 The DIPC will

- have operational responsibility for the effective implementation of this Policy
- give expert advice around the care of affected patients and liaise with the medical teams around positive results and antibiotic treatment if required
- in the event of an outbreak (two or more cases epidemiologically linked), chair the outbreak meetings and determine appropriate actions to be taken

- include details of all outbreaks in the monthly and annual DIPC reports

#### 4.4 Infection Prevention and Control Team (IPT)

- To ensure all staff are made aware of this guideline and have access to multi-resistant *Acinetobacter* patient's information leaflet
- To advise the ward staff on infection control measures and provide them with the necessary advice when a multi-resistant *Acinetobacter* infection is diagnosed
- Investigate promptly if there is more than one case on the same ward / department to determine whether the cases are epidemiologically linked. To collate all the necessary information and feed this back to the DIPC

#### 4.5 Head of Hotel Services

- The Head of Hotel Services is responsible for organising and managing any additional cleaning requirements as requested by the DIPC and IPT.

#### 4.6 All Staff

- It is the responsibility of nursing and medical staff to recognise and report any suspected infection, as soon as possible to the Infection Prevention Team or out of hours, to the on call Consultant Microbiologist.
- It is expected that the nurse in charge of each shift will ensure all staff on duty are aware of and adhere to Trust procedures in relation to infection prevention and control.

### 5.0 Background

5.1 *Acinetobacter* is a bacterium that is commonly found in the environment including soil and water. It can also survive in hospital environment for long periods.

5.2 At least 25% of healthy people carried *Acinetobacter* as part of the normal bacteria in their bodies and on their skin, and it poses very little risk to them.

5.3 There are over 30 different species of *Acinetobacter*, and a few of these, particularly a species called *Acinetobacter baumannii*, can cause serious infection to hospitalised patients especially those on ventilator, with burns or those that are immune-compromised.

5.4 Some *Acinetobacter* species have become resistant to many antibiotics and are known as **multi-resistant *Acinetobacter* (MRAB)**. The infections they cause can be difficult to treat.

5.5 MRAB can be spread on wards to susceptible patients by person-to-person contact, or contact with contaminated surfaces or medical equipment and other exposure in the environment.

5.6 Transmission of MRAB can be reduced by careful hand hygiene, environmental cleaning and disposal of exposed medical equipment after patient's discharge or transfer.

## **6.0 Definition of Multi-resistant Acinetobacter (MRAB)**

Multi-resistant Acinetobacter has been defined as Acinetobacter species isolates that are resistant to any aminoglycoside (e.g. gentamicin) **AND** to any third generation cephalosporin (e.g. ceftazidime, cefotaxime). Some of these isolates have begun to develop resistance to the last effective group of active antibiotic, carbapenems i.e. imipenem and/or meropenem, and are known as MRAB -C

## **7.0 Infection Prevention Precautions**

7.1 A patient found to be colonised or infected with MRAB must be isolated in a single room with a standard isolation sign on the door. The door to single room must be kept closed at all times.

7.2 The patient (and /or relatives as appropriate) should be informed of the infection / colonisation and should be provided with an information leaflet (Appendix 1)

7.2 The patient should remain in isolation for the duration of his/her stay in hospital, even if he/she is subsequently tested negative. This is because he/she may continue to be positive MRAB at an undetected level.

7.3 A disposable apron and gloves must be worn when giving hands-on care or in close contact with patient or their surroundings (this includes the domestic cleaning the room).

7.4 If the patient is coughing or has copious secretions from an affected site it is advisable to wear a disposable gown instead of an apron for hands-on care.

7.5 If suctioning is required (either via tracheotomy or mouth) gloves, gowns and goggles (face mask if patient is likely to cough) should be worn when carrying out this procedure.

7.6 Personal protective equipment (PPE) i.e. gloves, apron, goggles and mask must be disposed of prior to leaving the single room and following this sequence

- Gloves
- Apron
- Goggles (when worn)
- Mask (when worn)

Hand hygiene must be performed following removal of PPE

7.7 Gloves must not replace the need for hand hygiene – refer to the Hand Hygiene policy.

7.8 A designated nurse should ideally be assigned to care for this patient, but it is accepted that this may not be practical in which case strict adherence to the infection prevention precautions in section 7.3 - 7.7 must be followed.

- 7.9 Other disciplines such as dietitians or speech therapists should see this patient last. If this is not possible, then strict adherence to infection prevention precautions must be observed as detailed in Section 7.3 to 7.7.
- 7.10 Hand Hygiene must be performed on entry and exit to patient's single room.
- 7.11 Fans are not recommended for use to control patient's temperature or to keep patient cool because of dissemination of the multi-resistant organism
- 7.12 All standard infection control procedures should be reviewed ensuring all staff are aware of and follow current guidelines making changes if necessary on the advice of the IPT and Consultant Microbiologist.

## **8.0 Two or more Patients with Positive MRAB (colonised or infected) on the Ward/ Unit**

- 8.1 If two or more patients on a ward/unit found to be colonised or infected with MRAB, these patients must be isolated or cohort nursed in a bay with doors.
- 8.2 An investigation should be undertaken by a member of the Infection Prevention Team or a member of staff nominated by the Director of Infection Prevention and Control to determine whether cases are epidemiologically linked.
- 8.3 An outbreak team should be convened with case definition agreed and dates of admission and discharged, ward and bed locations of all infected case and colonised patients documented, along with time line analysis of patient activity such as movement to, and from, ward, theatre, and other departments. Refer to the Outbreak Policy for guidance.
- 8.4 There should be regular brief, focused outbreak meetings with all relevant healthcare workers and senior managers to agree an outbreak plan, to feedback key information, review the success of interventions and make new plans, as appropriate.
- 8.5 All antibiotics prescribed for affected cases must be reviewed. Where cases are increasing in number, an audit of the antimicrobial usage should be undertaken and the findings discussed at the outbreak meeting.

## **9.0 Screening of Patients**

- 9.1 Risk assessment of the affected cases should be performed, and the numbers and results of clinical specimens from other patients on the ward/unit reviewed to inform whether screening of other patients is indicated.
- 9.2 A patient that is infected with MRAB may require weekly screening for monitoring the effectiveness of interventions. The screening sites include nose, throat, perineum and any wounds, sputum, tracheostomy sites, the hairline (to detect dispersers), feces and the anti-cubital fossa.
- 9.3 The Microbiology Department will refer appropriate isolates to a Reference Laboratory for further characterisation and typing.

## **10.0 Instruments and Equipment**

- 10.1 The patient should have dedicated items of equipment such as B/P machine, stethoscope, temperature and oxygen saturation probes and lifting slings.
- 10.2 Special attention should be paid to ventilator circuits, suction catheters and humidifiers. Single-use items are preferred.
- 10.3 Disposable items such as gloves, dressings, suction catheters and oxygen masks must be kept to a minimum in the side room or cohort bay to reduce dust collection and wastage.
- 10.4 All unused disposal items (such as suction catheters, masks, yankauer suckers, dressing packs, boxes of gloves and consumables must be discarded on the patient's discharge or transfer
- 10.5 All re-usable equipment must be properly decontaminated before use on another patient, preferable with Tristel Fuse solution (1 sachet diluted in 5 litres of cold water). Refer to decontamination policy.
- 10.6 Patient's pillows, mattress and seat cushion must be disinfected with Tristel Fuse as above or discarded if damage or if strike through can be identified. Specialist mattresses must be cleaned after patient use according to manufacturers' instructions.

## **11.0 Environmental Cleaning**

- 11.1 Special attention should be paid to horizontal surfaces and dust-collecting areas, bedclothes, curtain rails, beds, tables, ventilators, sinks, doorknobs, and telephones.
- 11.2 Curtains should be changed as part of the terminal clean after an infected or colonised patient leaves. Where a curtain forms a common divide between two beds, it should be changed when one patient leaves.
- 11.3 Frequently touched points in the single room are to be cleaned with increased frequency (bedside table, door handles etc).
- 11.4 MRAB can survive in dust, much of which originates from patients' skin so removal of all dust as part of this terminal clean is crucial on patient's departure.
- 11.5 The floor should be cleaned by damp dusting to remove dirt and then mopped with Tristel Fuse solution. Suction cleaning is not recommended unless fitted with high efficiency filters to the exhaust and single use filters.
- 11.6 Following the patient's departure, the single room must be terminally cleaned and fogged with hydrogen peroxide vapour before returning to use. Radiator covers must also be removed and cleaned.

## **12.0 Transport of Patients to other Departments within the Hospital**

- 12.1 Visiting another department for an investigation due to clinical necessity is permitted. Good communication and documentation is essential.
- 12.2 The receiving department should be notified in advance so that appropriate facilities are available and the necessary precautions are applied. The patient should be seen at the end of the session/list.
- 12.3 In order to minimise contact and reduce the risk of cross-infection, the patient should be taken directly to and from the department and not left in waiting area.
- 12.4 Porters do not need to wear protective clothing unless they are assisting in transferring a patient to a trolley or wheelchair or likely to come into contact with infectious material, in which case a disposable apron is required. Protective clothing is not required for just pushing a bed or wheelchair.
- 12.5 Following transport, the mode of transport (trolley, chair, etc.) should be cleaned with Tristel Fuse Solution.
- 12.6 Hand hygiene must be performed before and after transporting patient

## **13.0 Visitors**

- 13.1 Visitors should wear apron regardless whether they are helping with patient's care or just sitting with the patient. They **do not** need to wear gloves.
- 13.2 Visitor should not visit any other patients in the hospital whilst visiting this patient.
- 13.3 All visitors must perform hand hygiene on entry and leaving the single room.

## **14.0 Transfer to other Hospitals**

- 14.1 When patients infected or colonised with MRAB, or exposed to it but screened and thought to be clear, are being transferred to another hospital, clinical staff should ensure that the receiving area is aware of the patient's infection status and the context of the MRAB exposure.
- 14.2 The Infection Control Team at the receiving hospital must be informed, prior to the transfer.
- 14.3 Colonisation with MRAB, as for other multiple-resistant organisms, must never be a reason for refusing admission if there are legitimate clinical reasons for the transfer.

## **15.0 Care of the Deceased**

- 15.1 Infection prevention precautions for handling deceased patients colonised or infected with MRAB are the same as those used in life.
- 15.2 A body bag is not required unless patient has significant oozing lesions or bleeding.
- 15.3 See also 11040 Infection Prevention: Care of the Deceased

## **16.0 Policy Compliance**

16.1 A datix form must be completed if a patient is not isolated following reporting of a multi-resistant *Acinetobacter* infection. This will allow the IPT to monitor trends to prevent future policy non-compliance.

## **17.0 Audit and Monitoring**

17.1 The Infection Prevention and Control Group reviews the Infection Control Policies.

17.2 An audit of compliance with this Policy will be undertaken as part of the Infection Prevention audit programme.

17.3 Cases of MRAB will be reported in the monthly Director of Infection Prevention and Control (DIPC) report.

## **18.0 Training**

18.1 Training will be provided in accordance with the Mandatory Training Policy and Training Needs Analysis

18.2 Bespoke training sessions will be provided by the Infection Prevention Team if the department requires further training.

## **19.0 Implementation and Communication**

19.1 This policy will be issued to the following staff to disseminate. These individuals will ensure their staff are made aware of the Policy:

- Ward Senior Sisters/Charge nurses – issue to all nursing staff within their ward
- Departmental Managers – issue to staff within their department
- Bed Management Team/Service Co-ordinators
- Clinical Directors and Director of Operations
- Head of Nursing and Lead Nurses
- Hotel Services Manager
- Consultants – issue to relevant Medical Staff

19.2 This guideline will also be issued via the Staff Focus and made available on the Intranet.

## **20.0 References**

Department of Health (2015) 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

[http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/documents/digitalasset/dh\\_093761.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_093761.pdf)

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<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/Acinetobacter/Guidelines/>

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UCLH, Patient information, Acinetobacter

<http://www.uclh.nhs.uk/PandV/PIL/Patient%20information%20leaflets/Acinetobacter.pdf>

Buckinghamshire Hospital, What is multi-resistant Acinetobacter (MRAB)?

<http://www.buckshealthcare.nhs.uk/Downloads/Patient-leaflets-Infection-Control/Multi-resistant%20Acinetobacter%20-%20MRAB%20-%20patient%20information%20leaflet.pdf>

University Hospitals Birmingham, MDR-Acinetobacter – Information for patients, carers and relatives,

<http://www.uhb.nhs.uk/pdf/PiAcinetobacter.pdf>

Enoch D.A, Summers C, Brown N.W, Moore L, Gillham M.I, Burnstein R.M, Thaxter R, Enoch L.M, Matta B & Sule O (2008), Investigation and management of MRAB-C in Cambridge, Uk, Journal of Hospital Infections, **70**: 109-118