Determining MRSA clearance

The following criteria need to be met in order to establish MRSA clearance:

- More than 3 months since last positive screen/result/test

AND

- No exposure to antiseptic body wash within 2 weeks of screening

AND

- No anti-MRSA antibiotic therapy within 3 months prior to screening

AND

- No indwelling device present that has been previously implicated in MRSA infection or colonisation

AND

- Negative screening swabs on 2 or more occasions taken at least one day apart from nose, throat, groins/perineum and any clinically relevant sites which may include wounds, sputum, urine, site of indwelling device or any other previous MRSA positive sites.
Background
Patients colonised with methicillin resistant *Staphylococcus aureus* (MRSA) are at an increased risk of developing a MRSA infection and are a potential source of cross infection. Decolonisation is a targeted control measure for reducing the transmission risk of MRSA. Topical antimicrobials are used to eliminate or suppress MRSA colonisation by reducing the bacterial load and therefore lowering the risk of endogenous infection and exogenous transmission.

Strategies for decolonisation should be determined by risk assessments in order to determine patients at high risk of infection or areas with high endemic rates.

Healthcare organisations who have specific policies for the decolonisation of persons with MRSA should follow their local policy.

Who could benefit from MRSA decolonisation?

**Patients who are:**
- to undergo high risk surgical procedures, e.g. cardiothoracic surgery, joint replacement or implantation surgery
- in a group at high risk of staphylococcal bacteraemia (e.g. patient undergoing haemodialysis)
- admitted to a high risk area e.g. ICU, burns, haematology, oncology and renal units
- implicated in an MRSA outbreak within an acute healthcare facility.

**Healthcare workers who are:**
- implicated in an MRSA outbreak
- working in high risk areas or involved in performing high risk procedures.

**Exceptions:**
MRSA decolonisation is unlikely to be successful and is not recommended in the following situations unless there are other extenuating factors:
- patients with an active MRSA infection
- patients with scabies or exfoliative skin conditions
- patients with chronic wounds, ulcers or other areas of skin breakdown
- patients with indwelling medical devices, whether temporary or long term e.g. intravenous (IV) devices, urinary catheters, percutaneous endoscopic gastrostomy (PEG) tube.

Advice from an infectious disease physician or clinical microbiologist may be helpful in the situations described above.

Applying a MRSA decolonisation regime

**A recommended regimen is as follows:**

1. **Mupirocin 2% ointment intra-nasally three times a day for 5 days**
   **PLUS**
2. **Chlorhexidine 4% body wash** daily for 5 days
   **PLUS**
3. **Wash hair daily with chlorhexidine 4% body wash** for 5 days
   **PLUS**
4. **Mouth rinse of chlorhexidine gluconate, 0.2% undiluted, 2 x 10 ml for 5 days.**
   If the patient has dentures/partial plates they should be soaked nightly in a denture cleaning product.

**AND**
5. **Change bed linen on day 1, 2 and 5 of therapy**

   a Alternatives include Hexachlorophane 3% emulsion, Triclosan 1% body wash
   b Alternatives include Cetrimide 20% shampoo 3rd daily

Additional considerations

- If throat decolonisation is required, advice should be sought from an infectious disease specialist or clinical microbiologist.
- People undergoing a home-based decolonisation regime should be given specific and comprehensive written guidelines
- Screening post decolonisation may commence 2 weeks after therapy has been ceased
- If decolonisation therapy fails, consult an Infectious Diseases Consultant for advice on future measures.
- A patient undergoing treatment for current MRSA infection does not preclude concurrent decolonisation; however it is important to note that the patient will not fulfil the criteria for clearance.