MRSA decolonisation treatment - information for healthcare providers

Introduction
- Decolonisation is the process of eradicating or reducing asymptomatic carriage of MRSA.
- The nares are the primary site of colonisation. Other sites of colonisation include the nasopharynx, skin (especially skin folds), perineum, axillae and the gastrointestinal tract.
- Decolonisation should only commence once the infection has cleared.
- When an individual has MRSA, contamination of their environment and clothing can occur due to the shedding of skin scales and touching surfaces with contaminated skin or hands.

Indications
- The decision to recommend decolonisation should follow an assessment of the individual (and their household contacts) that includes considering their willingness and capability to comply with the regimen. Decolonisation should be considered when individuals or their household contacts:
  - have recurrent CA-MRSA or staphylococcal-like infections
  - are at increased risk for acquiring staphylococcal infection, such as those with chronic skin disorders, diabetes, peripheral vascular disease or immunosuppression
  - are healthcare workers or carers
  - when there are ongoing MRSA infections occurring in a well-defined, closely-associated cohort or group, for example a dormitory, day care centre or sports club.
- If there are ongoing infections in a household despite treatment, decolonisation of all household members should be considered, even if some members do not have an active infection. All household members should commence decolonisation on the same day.
- Decolonisation is not always successful on the first attempt, and may need to be repeated.

Decolonisation treatment
- **Body wash:** daily for 5 days. Use triclosan 1% (500ml) or chlorhexidine gluconate 4% (500ml). Both products are available over-the-counter at pharmacies. Chlorhexidine gluconate is contraindicated in people with a perforated eardrum.
- **Nasal ointment:** twice daily for 5 days. Use mupirocin 2% (3g Bactroban tube). A prescription is required. This item is on the Pharmaceutical Benefit Scheme (PBS) for Aboriginal or Torres Strait Islander people only, for the purpose of treatment of nasal colonisation with *S.aureus*.
- **Dentures:** soak dentures overnight in a denture cleaning product for example Steradent or Polident.
- **If there is known throat carriage:** gargle twice daily with a 0.2% chlorhexidine-based mouthwash, for example, Savacol or Rivacol, which are available over-the-counter at a pharmacy.
Post-decolonisation screening for clearance

- Post-decolonisation screening to determine if clearance has been achieved is not routinely recommended. However, it can be conducted when the outcome of screening is considered useful for the management of MRSA, for example, when:
  - individuals are at increased risk for infection due to other existing medical conditions
  - there are ongoing infections occurring in households or a well-defined, closely-associated cohort, such as a dormitory, sports club or day-care centre
  - individuals request to know their outcome
  - decolonisation and clearance is requested by the Department of Health for CA-MRSA strains of particular concern.
- If clearance screening is indicated, obtain swabs (pre-moisten dry sites with sterile water or saline) from nostrils, throat and any wounds or skin lesions, 1 week and 12 weeks after completion of decolonisation to ensure clearance of the organism.

Factors contributing to decolonisation failure

- Decolonisation is less likely to be successful if the individual has throat carriage, chronic or open wounds or permanent indwelling devices in-situ.
- There is the potential for failure and/or re-colonisation if there is non-compliance with the requirements for personal hygiene and environmental cleanliness. These requirements are outlined in *MRSA decolonisation treatment-information for consumers*.
- Decolonisation should not be commenced on people with scabies or active exfoliative skin conditions, such as excema or psoriasis, as it is likely to fail and the skin treatments may exacerbate their condition. Any underlying exfoliative skin condition should be treated first, in consultation with a dermatologist.

Important information

- Specific antibiotics may need to be prescribed as part of the decolonisation regimen for people who have recurrent infections following two consecutive decolonisation treatments. This should be in consultation with an infectious diseases physician or clinical microbiologist.
- Mupirocin resistance has been associated with widespread, prolonged use and its use should initially be limited to 2 consecutive decolonisation treatments.
- If rifampicin is used, it will always be recommended in combination with other antibiotics (never as a single agent). Rifampicin is an authority-required antimicrobial and MRSA treatment is not one of the indications for its use in the PBS.
- Decolonisation treatment of neonates (< 2 months of age) should not be commenced in the community unless specifically recommended by an infectious diseases physician or clinical microbiologist.

Visit [WA Health](https://www.wa.gov.au) for further information.