

Principles of decolonisation

- MRSA may asymptotically colonise the skin, nose, throat, perineum or axillae and these areas may act as a reservoir for infection.
- Decolonisation is the process of eradicating carriage of MRSA and is recommended for cases who have acquired CA-MRSA to reduce the risk of recurrent infections and / or transmission of CA-MRSA to another person.
- Decolonisation should commence once the CA-MRSA infection has cleared.
- Throat carriage is associated with persistent carriage and may result in decolonisation failure.
- Maintaining good personal hygiene, regular changing of clothes and regular laundering of clothes, bed linen and towels is essential for successful decolonisation.
- Environmental contamination occurs due to shedding of skin scales and touching surfaces with bare skin and hands that are contaminated with CA-MRSA. Without cleaning, MRSA is known to survive at least 9 days on surfaces and fabrics. Therefore, environmental cleanliness is an important component of the decolonisation treatment regimen to reduce the potential risk of re-colonisation.
- Cases that cannot or are unwilling to comply with the hygiene and environmental requirements should still be offered and encouraged to take at least one course of decolonisation treatment following an infection episode.
- Decolonisation is unlikely to be successful if people have open wounds or permanent indwelling devices in-situ, e.g. feeding tubes, tracheostomy, and is therefore not recommended in these cases.
- Decolonisation should not be commenced on people with active exfoliative skin conditions (e.g. psoriasis), as it is likely to fail and the skin treatments may exacerbate their condition. The underlying condition should be treated first, in consultation with a dermatologist.
- Decolonisation treatment is not a medical emergency and actions for people to obtain the treatment can be made during normal working hours.

Detailed information on CA-MRSA, decolonisation and treatment of CA-MRSA infections can be found in the “Guidelines for the management of community-associated methicillin resistant *Staphylococcus aureus* clones in Western Australia” available at:

<http://www.public.health.wa.gov.au/3/896/3/camrsa.pm>



Decolonisation treatment regimen (10 day course)

■ Topical treatment

- body wash daily with triclosan 1% (500ml). This is available over-the-counter at pharmacies; estimated cost to consumer \$18 - \$24
- nasal ointment twice daily with mupirocin 2% (3g). A prescription is required and estimated cost of private prescriptions is up to \$26. This item is on the Pharmaceutical Benefit Scheme (PBS) for Aboriginal or Torres Strait Islander person only, for the purpose of nasal colonisation with *S.aureus*.

■ Additional treatment

- patients with dentures: soak dentures overnight in a denture cleaning product e.g. Steradent or Polident
- patients with known throat carriage: gargle twice daily with a chlorhexidine-based mouthwash which are available over-the-counter at pharmacies.

■ Patient education

- provide patient with the leaflet "Information for people who have CA-MRSA - Decolonisation treatment"
- emphasise personal hygiene, hand-washing and household cleanliness
- instruct patient to keep any wounds covered at all times
- instruct patient to report new infections that develop during, or after, the decolonisation treatment. If the first decolonisation is unsuccessful, a repeat treatment will be necessary.

■ Important points

- consider referral to an Infectious Diseases Physician or Clinical Microbiologist for cases or families with recurrent infections following decolonisation
- 10 days is the preferred duration for decolonisation treatment in WA. In particular situations where the likelihood of completing a 10 course is low, shorter duration courses (5 or 7 days) may suffice
- decolonisation treatment of neonates (< 2 months) should not be commenced in the community unless specifically recommended by an Infectious Diseases Physician or Clinical Microbiologist
- mupirocin resistance has been associated with widespread and prolonged use. Limiting use to a maximum of 10 days and ensuring a minimum period of one month between recurrent use is advised.

■ Decolonisation regimen with antibiotics added

- Specific antibiotics may be prescribed as part of the decolonisation regimen for cases with recurrent infections and/or throat carriage treatment despite good compliance with the regimen. This should be in consultation with an Infectious Diseases Physician or Clinical Microbiologist
- 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.

