



## GUIDELINE

# Staphylococcus aureus Decolonisation - Paediatric

<b>Scope (Staff):</b>	Clinical Staff – Medical, Nursing, Pharmacy
<b>Scope (Area):</b>	Perth Children's Hospital (PCH)

### Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this [disclaimer](#)

## Aim

This document provides guidance on topical Staphylococcal decolonisation for methicillin resistant *Staphylococcus aureus* (MRSA) and methicillin sensitive *Staphylococcus aureus* (MSSA) for:

1. All patients prior to high risk surgical procedures (as outlined in: [Staphylococcus aureus Decolonisation for Procedures](#) – internal link)
2. All patients undergoing central venous access device (CVAD) insertion.
3. Patients and family contacts of patients with recurrent MRSA or MSSA infection.

It should be read in conjunction with the WA Department of Health operational directive:

- [Infection Prevention and Control of Methicillin Resistant \*Staphylococcus aureus\* \(MRSA\) in Western Australian Healthcare Facilities \(HCFs\)](#)

PCH policies;

- [Staphylococcus aureus Decolonisation for Procedures](#) – internal link)
- [Multi-Resistant Organisms Identification and Management.](#)
- [Central Venous Access Devices \(CVAD\) and Midline Insertion and Management](#)
- Patients and their carers should be provided with the Health Facts leaflet [Staphylococcus aureus decolonisation](#)

## Definitions

**Decolonisation:** the use of topical antimicrobial agents with the aim of eradicating *Staphylococcus aureus* (*S. aureus*) carriage.

**Methicillin-susceptible *Staphylococcus aureus* (MSSA):** *S. aureus* strains that are susceptible to methicillin and thus to beta-lactam antibiotics including flucloxacillin, cephalosporins and carbapenems. The majority of these organisms are resistant to benzylpenicillin, phenoxymethylpenicillin and amoxicillin / ampicillin.

**Methicillin-resistant *Staphylococcus aureus* (MRSA):** *S. aureus* strains that are resistant to methicillin (and consequently to all beta-lactam antibiotics including penicillins, cephalosporins and carbapenems). There are a number of strain types including Healthcare Associated (HA-MRSA) and Community Associated (CA-MRSA) strains of MRSA.

**ADM:** Automated Dispensing Machine

**CNM:** Clinical Nurse Manager

**CSO:** Clinical Support Officer

**CVAD:** Central Venous Access Device

**PBS:** The Pharmaceutical Benefits Scheme

**pNIMC:** the Paediatric National Inpatient Medication Chart

**UMRN:** Unique Medical Record Number

## Process

### Patient details:

- All prescriptions MUST include a patient UMRN. Without this number, the prescription can't be processed by dispensary. Pharmacy staff members are not able to obtain a UMRN on behalf of patients or family members.
- If a contact does not have a UMRN, one can be created by clerical staff or alternatively contact 6456 5670 or [pch.pmiofficer@health.wa.gov.au](mailto:pch.pmiofficer@health.wa.gov.au)

### Decolonisation:

- All patients less than 3 months old and any patient that hasn't responded to standard therapy should be discussed with the infectious diseases team prior to provision of decolonisation products.
- Routine decolonisation therapy should be completed in the following cohorts:
  - All patients prior to high risk surgery.
    - Patients should commence decolonisation 5 days prior to the operation. Refer to the guideline: [Staphylococcus aureus Decolonisation for Procedures](#). (Internal link)
  - All patients undergoing CVAD insertion.

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- Ideally, decolonisation should commence 5 days prior to CVAD insertion. However, if the need for a central line is clinically urgent, commence decolonisation as soon as possible and continue for the full 5-day course.
- o Decolonisation of a patient with recurrent MRSA/MSSA infection.
  - The patient and family members or close contacts living in the same household of a patient with recurrent MRSA or MSSA infection should undergo decolonisation per the listed doses below. Initial decolonisation should be completed with mupirocin 2% nasal ointment and either chlorhexidine gluconate 2% hand and body wash in patients 3 months and older, or chlorhexidine gluconate 1% Obstetric Care Lotion in children less than 3 months old.
  - For the decolonisation of patients and family contacts of patients with recurrent MRSA or MSSA infection, one tube of mupirocin 2% nasal ointment and one bottle of chlorhexidine gluconate 2% hand and body wash should be prescribed to the primary patient. An additional tube of the chlorhexidine gluconate 1% Obstetric Care Lotion may be prescribed if the primary patient or any contacts are less than 3 months old. This amount will be sufficient to treat a household of up to three people. For a household of more than 3 people, a second tube of ointment and a second bottle of the wash should be prescribed.

Mupirocin 2% nasal ointment			
AGE	DOSE	QUANTITY	SUPPLY
All ages	Apply a 'double matchhead' quantity of ointment into both nostrils TWICE daily for 5 days.	1 tube (5g)	<p><b>Inpatient:</b> Prescribe the ointment on the pNIMC for inpatient use. Mupirocin nasal ointment is stocked in the ADM in clinical areas.</p> <p><b>Outpatient or discharge:</b> Prescribe the ointment on an outpatient or discharge prescription. The prescription can be dispensed by PCH Pharmacy or by a community pharmacy. Mupirocin nasal ointment is a prescription only medicine (Schedule 4).</p>

Chlorhexidine gluconate 2% Hand and Body Wash			
AGE	DOSE	QUANTITY	SUPPLY
≥3 months old	<ul style="list-style-type: none"> <li>Apply sparingly to the head and body, excluding the face, ONCE daily for 5 days paying particular attention to hairy areas of skin. Leave on for 2 minutes before washing off.</li> <li>Shampoo the hair using approximately 25mL of the wash on day 1, 3 and 5 during treatment.</li> <li>Conditioner may be applied after shampooing.</li> <li>Do not wash with any other soap or cleaner, dry with a clean towel and put on clean clothing.</li> </ul>	1 bottle (500mL)	<p><b>Inpatient:</b> Prescribe the wash on the pNIMC for inpatient use. Bottles are stocked in clinical areas and are ordered through iProcurement by the CSO, CNM or ward clerk. Chlorhexidine wash is unscheduled and is not stocked in the ADMs.</p> <p><b>Outpatient or discharge:</b> Prescribe the wash on an outpatient or discharge prescription. The prescription can be dispensed by PCH Pharmacy or by a community pharmacy.</p>

Chlorhexidine gluconate 1% Obstetric Care Lotion			
AGE	DOSE	QUANTITY	SUPPLY
<3 months old	Apply sparingly to the head and body, excluding the face, ONCE daily for 5 days. Leave on for 30 seconds before washing off.	1 tube (40mL)	<p><b>Inpatient:</b> Prescribe the lotion on the pNIMC for inpatient use. Lotion is stocked in clinical areas and is ordered through iProcurement by the CSO, CNM or ward clerk. Chlorhexidine lotion is not stocked in the ADMs.</p> <p><b>Outpatient or discharge:</b> Prescribe the lotion on an outpatient or discharge prescription. The prescription can be dispensed by PCH Pharmacy or by a community pharmacy.</p>

### Bleach Baths

- For patients  $\geq 3$  months old, an alternative to the chlorhexidine gluconate 2% hand and body wash is to use bleach baths THREE times a week for one week as an outpatient.
- For children, pour a quarter of a cup (60mL) of household bleach (sodium hypochlorite 6%) into a standard size household bath that is approximately a quarter full of warm water. For infants who bathe in smaller baths, dilute approximately 12mL bleach with every 10L of warm water. Ensure water is mixed thoroughly before bathing. Soak up to the neck in bathwater for 15 minutes. Avoid contact with the face and eyes. The skin is likely to become dry during this treatment; use moisturiser if required.

**Caution:** concentrated bleach is corrosive.

### Triclosan 1 % wash

AGE	DOSE	QUANTITY	SUPPLY
$\geq 3$ months old	<ul style="list-style-type: none"> <li>• For patients with a documented allergy to chlorhexidine gluconate</li> <li>• Apply sparingly to the head and body, excluding the face, ONCE daily for 5 days paying particular attention to hairy areas of skin. Leave on for 2 minutes before washing off.</li> <li>• Shampoo the hair using approximately 25mL of the wash on days 1, 3 and 5 during treatment.</li> <li>• Conditioner may be applied after shampooing.</li> <li>• Do not wash with any other soap or cleaner, dry with a clean towel and put on clean clothing.</li> </ul>	1 tube (40mL)	<p><b>Inpatient:</b> Prescribe the wash on the pNIMC for inpatient use. Tubes are stocked in clinical areas and are ordered through iProcurement by the CSO, CNM or ward clerk. Triclosan wash is unscheduled and is not stocked in the ADMs.</p> <p><b>Outpatient or discharge:</b> Prescribe the wash on an outpatient or discharge prescription. The prescription can be dispensed by PCH Pharmacy or by a community pharmacy. Five tubes of Triclosan 1% wash will be prescribed/ supplied.</p>

- In addition to the above treatment:
  - The patient's house should be cleaned well, vacuuming floors and soft furnishings and wiping over all frequently touched surfaces in the home.
  - Clothes, underwear, pyjamas, bedlinen and towels should be washed using a hot wash cycle and dried in the sun where possible.
  - Towels must not be shared amongst members of the family and should be washed in very hot water.

### Supply:

Outpatient orders must be written on a PCH PBS prescription and presented to the PCH Pharmacy during business hours (Monday to Friday 0845-1700). The outpatient charge will be a single patient charge per item at either the general or concession rate depending on eligibility. For concession rates, the primary patient's concession card must be presented.

Families may also choose to have the prescription dispensed at a community pharmacy. For patients with a concession card, this will likely incur higher fees than those charged at the PCH Pharmacy because the PBS does not subsidise chlorhexidine or triclosan. Refer to the [PBS schedule](#) for patient eligibility to receive subsidised mupirocin nasal ointment.

#### Related CAHS internal policies, procedures and guidelines

[Staphylococcus aureus Decolonisation for Procedures](#)

[Infection Prevention and Control of Methicillin Resistant Staphylococcus aureus \(MRSA\) in Western Australian Healthcare Facilities \(HCFs\)](#)

[Multi-Resistant Organisms Identification and Management](#)

[Central Venous Access Devices \(CVAD\) and Midline Insertion and Management](#)

#### References and related external legislation, policies, and guidelines *(if required)*

1. Infection Prevention and Control of Methicillin Resistant Staphylococcus aureus (MRSA) in Western Australian Healthcare Facilities (HCFs). In: Australia DoHW, editor. Perth: Department of Health Western Australia; 2013.
2. The Pharmaceutical Benefits Scheme Canberra: Department of Health; 2018 [updated 01/07/2020; cited 2020 23<sup>rd</sup> July 2020]. Available from: <http://www.pbs.gov.au/pbs/home>.
3. Fisher RG, Chain RL, Hair PS, et al Hypochlorite killing of community-associated methicillin-resistant Staphylococcus aureus. *Pediatr Infect Dis J* 2008; 27(10):934–5
4. Antibiotic Writing Group. eTG complete. West Melbourne: Therapeutic Guidelines Ltd; 2020. Available from: <https://tgldcdp-tg-org->

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[au.pklibresources.health.wa.gov.au/etgAccess](http://au.pklibresources.health.wa.gov.au/etgAccess).

### Useful resources (including related forms)

[ChAMP Internet Page](#)

[Staphylococcus aureus treatment](#)

This document can be made available in alternative formats on request.

File Path:	<a href="W:\Safety &amp; Quality\CAHS\CLOVERS MEDICAL Pharmacy\Procedures Protocols and Guidelines\ChAMP\Word\Empiric Guidelines\PCH Templated (ED Guidelines)">W:\Safety &amp; Quality\CAHS\CLOVERS MEDICAL Pharmacy\Procedures Protocols and Guidelines\ChAMP\Word\Empiric Guidelines\PCH Templated (ED Guidelines)</a>		
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## Healthy kids, healthy communities

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