Children's Antimicrobial Management Program (ChAMP)

GUIDELINE

Staphylococcus aureus Decolonisation - Paediatric

Scope (Staff): Clinical Staff – Medical, Nursing, Pharmacy
Scope (Area): 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 procedures (as outlined in: <u>Staphylococcus aureus</u> <u>Decolonisation for Procedures</u> internal link) Inclusive of recurrent or rescheduled procedures occurring 14 days post the last decolonisation.
- 2. All patients undergoing central venous access device (CVAD) insertion.
- 3. Patients and family contacts of patients with recurrent MRSA or MSSA infection or persistent MRSA or MSSA colonisation.

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 <u>Staphylococcus aureus decolonisation.</u>

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, most cephalosporins and carbapenems). There are a number of strain types including Healthcare Associated (HA-MRSA) and Community Associated (CA-MRSA) strains of MRSA. These are alerted as Micro B and Micro C alerts on Clinical Manager as per the Micro Alerts and Multi-Resistant Organisms policy.

ADM: Automated Dispensing Machine

CNM: Clinical Nurse Manager

CSO: Clinical Support Officer

CVAD: Central Venous Access Device

PBS: Pharmaceutical Benefits Scheme

PHMC: WA Paediatric Hospital Medication Chart.

UMRN: Unique Medical Record Number

Process

Patient details:

- A PCH prescription will be written for each individual patient and close contact with a UMRN. If a contact does not have a UMRN, one can be generated by clerical staff or alternatively contact 6456 5670 or pch.pmiofficer@health.wa.gov.au.
- The Pharmacy Department cannot generate a UMRN.

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 procedures including CVAD insertion.

- Patients should commence decolonisation 5 days prior to the procedure or CVAD insertion. Refer to the guideline: <u>Staphylococcus aureus</u> <u>Decolonisation for Procedures.</u> (Internal link)
- Ideally, decolonisation should commence 5 days prior to the procedure or CVAD insertion. However, if the need for a central line or procedure is clinically urgent, commence decolonisation as soon as possible and continue for the full 5-day course.
- Decolonisation should be repeated if there is a delay in the planned CVAD insertion or surgery date and ≥ 14 days have elapsed since the previous decolonisation course.
- Decolonisation of a patient with recurrent MRSA/MSSA infection or colonisation.
 - 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.
 - Decolonisation should commence AFTER the completion of systemic antibiotic treatment for MRSA or MSSA infection.
 - Each patient requiring decolonisation (either primary patient or family contact) requires a separate prescription for mupirocin 2% nasal ointment as it is a schedule 4 (prescription only) medication.
- For the decolonisation of patients and family contacts of patients with recurrent MRSA or MSSA infection, one 500 mL bottle of chlorhexidine gluconate 2% hand and body wash is generally sufficient to complete a decolonisation course for 3 patients. An additional tube of the chlorhexidine gluconate 1% Obstetric Care Lotion may be prescribed for any contacts of the primary patient who are less than 3 months old. For a household of more than 3 people, a second bottle of the wash or lotion should be prescribed to an appropriate contact.
- Decolonisation failure may occur when:
 - There is throat carriage, chronic or open wounds, presence of indwelling catheters. Consider referral with the Infectious Diseases team.
 - Non-compliance with environmental cleaning recommendations.
 - Patients have additional skin conditions (e.g. eczema, psoriasis or scabies).
 Treatment of these skin conditions should be optimised prior to commencing decolonisation.

Treatment regimens

Agent	Age	Dose			
Mupirocin 2% nasal ointment	All ages	 Apply a 'double matchhead' quantity of ointment into both nostrils TWICE daily for 5 days. 			
Plus ONE of the following wash options;		Any product remaining at the end of treatment should be discarded.			
First line – chlorhexidine v	First line – chlorhexidine wash products				
Chlorhexidine gluconate 2% hand and body wash	≥3 months old	 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. 			
		Shampoo the hair using approximately 25 mL of the wash on day 1, 3 and 5 during treatment.			
		Conditioner may be applied after shampooing.			
		 Do not wash with any other soap or cleaner, dry with a clean towel and put on clean clothing. 			
Chlorhexidine gluconate 1% Obstetric Care Lotion	<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. 			
		Do not wash with any other soap or cleaner, dry with a clean towel and put on clean clothing.			

Dose	Age	Agent
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Alternative wash options – in patients where chlorhexidine products are not suitable or not tolerated.					
Bleach baths	≥3 months old	 For children, pour a quarter of a cup (60 mL) 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 12 mL bleach with every 10 L of warm water. Ensure water is mixed thoroughly before bathing. Soak up to the neck in bathwater for 15 minutes THREE times a week for one week. Wash the head and face but do not immerse head in water. Avoid contact with the face and eyes. The skin is likely to become dry during this treatment; use moisturiser if required. 			
Triclosan 1% wash	≥3 months old	 For patients with a documented allergy to chlorhexidine gluconate. 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. Shampoo the hair using approximately 25 mL of the wash on days 1, 3 and 5 during treatment. Conditioner may be applied after shampooing. Do not wash with any other soap or cleaner, dry with a clean towel and put on clean clothing. 			
Octenisan wash lotion	≥3 months old	 For patients with a documented allergy to chlorhexidine gluconate Apply the octenisan wash lotion directly onto wet skin or using a damp cloth. Leave on for at least 1 minute before washing off. Shampoo the hair using approximately 25 mL of the wash on days 1, 3 and 5 during treatment. Do not wash with any other soap or cleaner, dry with a clean towel and put on clean clothing. 			

- 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.
 - o Towels must not be shared amongst members of the family and should be washed in very hot water.

Supply

Agent	Inpatient	Outpatient or discharge
Mupirocin 2% nasal ointment – 5g tube Note: Each individual requiring decolonisation requires a separate prescription for mupirocin 2% nasal ointment.	Prescribe the ointment on the PHMC for inpatient use. Mupirocin nasal ointment is stocked in the ADM in clinical areas.	Prescribe the ointment on a separate outpatient or discharge prescription for each patient requiring decolonisation. The prescription can be dispensed by PCH Pharmacy or supplied by a community pharmacy. Mupirocin nasal ointment is a prescription only medicine (Schedule 4).
chlorhexidine gluconate 2% hand and body wash chlorhexidine gluconate 1% Obstetric Care Lotion	Prescribe the wash on the PHMC for inpatient use. Bottles are stocked in clinical areas or are ordered through iProcurement by the CSO, CNM or ward clerk. These wash products are unscheduled and are not stocked in the ADMs.	Prescribe the wash on an outpatient or discharge prescription. The prescription can be dispensed by PCH Pharmacy or supplied by a community pharmacy.
Triclosan 1% wash		
Octenisan wash lotion		Octenisan wash is not a pharmacy line and must be supplied to the patient or family from the ward or clinic.
Bleach baths	Not generally used for inpatients.	Fragrance-free household bleach can be used.

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 patient charge is dependent on their admission category (e.g. inpatient versus outpatient). Inpatients requiring discharge medication supplied by PCH pharmacy will not be charged. 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

- 1. (2025, 1st March). "The Pharmaceutical Benefits Scheme." Canberra: Department of Health; 2025, Retrieved 12th March 2025, Available from http://www.pbs.gov.au/pbs/home.
- (2025). Decolonisation treatment for MRSA. Department of Health Western Australia. Perth, Public Health. Available from https://www.health.wa.gov.au/Articles/A E/Decolonisation-treatment-for-MRSA
- 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 (2022). Therapeutic Guidelines Antibiotic. West Melbourne, Therapeutic Guidelines Ltd.

Useful resources (including related forms)

ChAMP Internet Page

Staphylococcus aureus decolonisation - Arabic

Staphylococcus aureus decolonisation - Dari

<u>Staphylococcus aureus decolonisation – Karen</u>

Staphylococcus aureus decolonisation – Simplified Chinese

Staphylococcus aureus decolonisation - Vietnamese

Staphylococcus aureus decolonisation

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

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