



## PAEDIATRIC ACUTE CARE GUIDELINE

### Antibiotics - Hospital in the Home (HiTH)

<b>Scope (Staff):</b>	All Emergency Department Clinicians
<b>Scope (Area):</b>	Emergency Department

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## Antibiotics - Hospital in the Home (HiTH)

Some children with common infections presenting to the emergency department may be deemed to be unsuitable for oral antibiotics (e.g. more severe disease; unable to tolerate or absorb oral antibiotics) yet well enough to be managed without inpatient hospital-care. The following guidelines have been developed so children with common presentations to the Emergency Department at PMH can access HiTH directly from ED for intravenous (IV) antibiotic therapy. Once HiTH therapy has been deemed appropriate by the admitting team consultant, children are reviewed by the HiTH Nursing Co-ordinator and accepted onto the HiTH program whenever possible. Discharge from ED will be contingent upon the availability of HiTH nursing staff and appropriately prepared home IV antibiotics.

### HiTH Admission Pathway from the Emergency Department

Diagnosis of **cellulitis, periorbital cellulitis, cervical lymphadenitis or UTI/pyelonephritis** made by reviewing ED doctor  
Patient **clinically stable**



Emergency Department Consultant confirms HiTH therapy is **appropriate**



ED doctor contacts HiTH nurse coordinator (ext 8379) between 0700 - 2100 to confirm **HiTH availability**



ED doctor contacts admitting specialty consultant to **accept patient** onto HiTH



**Intravenous antibiotics** charted as per HiTH antibiotic guidelines (max. TDS)  
**First dose** to be administered in ED  
 Chart sent to **pharmacy** to order CIVAS (weekdays)



Chart **normal saline flushes** and **adrenaline** (not dispensed)  
**Oral stepdown** antibiotic prescription provided to patient or HiTH nurse



**Booked review** or **discharge plan** confirmed with specialty team and patient prior to discharge

- HiTH can offer up to three nursing visits per day, therefore a maximum frequency of TDS dosing can be prescribed, to be administered between the hours of 0800 and 2130. Where possible, less frequent dosing is preferred to facilitate greater numbers of HiTH patients.
- The following list provides recommended therapies for children with common infections. This list is not exhaustive for indications for HiTH management (see [Antibiotic Guidelines for HiTH patients](#) for further information). When patients are commenced on HiTH from ED and have microbiological specimens collected, these should be checked at 48 hours to confirm appropriate antibiotic selection for step-down. This is most relevant to UTI management.

Diagnosis / Indications for HiTH	IV Antibiotic/s dosage and frequency (1-4 days)	Known MRSA colonisation / infection	Subsequent oral antibiotic choice	Usual total duration of therapy (IV + oral)
Cellulitis	Cephazolin 50mg/kg (max 2g) TDS	Trimethoprim/ sulphamethoxazole PO 4mg/kg (of trimethoprim component) BD <b>OR</b> ^Clindamycin PO/IV 10mg/kg TDS	Oral Cephalexin 12.5mg/kg (to a maximum of 500mg) QID <b>OR</b> Trimethoprim/ sulphamethoxazole PO 4mg/kg (of trimethoprim component) BD	5 – 10 days

Periorbital cellulitis	Ceftriaxone 100mg/kg (max 2 g) once daily <b>Please note</b> this regime is for HiTH patients only – differs from hospital ChAMP guidelines	Ceftriaxone 50mg/kg (max 2g) once daily <b>AND</b> ^Clindamycin PO/IV 10mg/kg TDS <b>OR</b> Trimethoprim/sulphamethoxazole PO 4mg/kg (of trimethoprim component) BD	Oral Amoxicillin/clavulanic acid 25mg/kg (max 875mg amoxycillin component) BD	7 days
Cervical lymphadenitis	Cephazolin 50mg/kg (max 2g) TDS	Trimethoprim/sulphamethoxazole PO 4mg/kg (of trimethoprim component) BD <b>OR</b> ^Clindamycin PO/IV 10mg/kg TDS	Oral Cephalexin 12.5mg/kg (to a maximum of 500mg) QID	7 days
UTI/pyelonephritis	Ceftriaxone 50mg/kg (max 2g) once daily	N/A	Oral Cephalexin 12.5mg/kg (to a max of 500mg) QID <b>OR</b> Oral Amoxicillin/clavulanic acid 25mg/kg (max 875mg amoxycillin component) BD	7-10 days
^Oral clindamycin is very unpalatable unless a child can take capsules. Oral trimethoprim/sulphamethoxazole is preferred in younger children. If oral MRSA therapy is not tolerated, consider IV clindamycin.				

All dosing recommendations are for intravenous preparation of the drug in children with normal renal function aged >3 months old. Individual prescribers should know the common and uncommon drug associated toxicities. Monitoring should be performed as per **ChAMP antimicrobial monographs**. Additional monitoring may be required in certain clinical situations to monitor for drug related adverse events and clinical progress. Patients on HiTH for > 7 days require minimum weekly review by the managing team.

**Please note:**

- These are empiric guidelines and may require adjustment in individual cases. It is recommended that deviation from these guidelines be discussed with the clinical microbiologist and/or infectious diseases consultant/fellow.
- Children with a history of previous serious adverse reactions to IV antibiotics or mastocytosis are NOT suitable for home IV antibiotics. Children on beta-blockers need to be treated with caution as they may be resistant to adrenaline usage.
- For oral step-down therapy:
  - For MRSA (colonisation, infection or risk factors), continue oral treatment with the same oral MRSA active agent that was used in the initial therapy. Oral trimethoprim/sulphamethoxazole (cotrimoxazole) is far more palatable in the syrup formulation than oral clindamycin. Small children usually prefer oral trimethoprim/sulphamethoxazole (cotrimoxazole) over clindamycin.
  - Please refer to complete ChAMP guidelines for oral step-down alternatives in

delayed or immediate penicillin allergy.


- All patients require an order of adrenaline to be charted (but not dispensed):

Weight band of child	Dose of Adrenaline
< 5 kg	0.05mL of 1:1000 Adrenaline (50 microg adrenaline)
5 – 10kg	0.1mL of 1:1000 Adrenaline (100 microg adrenaline)
10 – 20kg	EpiPen jnr (150 microg of adrenaline)
> 20kg	EpiPen (300 microg of adrenaline)

## References

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File Path:			
Document Owner:	Dr Meredith Borland HoD, PMH Emergency Department		
Reviewer / Team:	Kids Health WA Guidelines Team		
Date First Issued:	15 October, 2015	Version:	
Last Reviewed:	15 October, 2015	Review Date:	15 October, 2017
Approved by:	Dr Meredith Borland	Date:	15 October, 2015
Endorsed by:	Medical Advisory Committee	Date:	15 October, 2015
Standards Applicable:	NSQHS Standards: 		
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