

MANAGEMENT OF ACUTE BACTERIAL MENINGITIS IN INFANTS AND CHILDREN

This PCP relates to NSW Health PD	<i>NSW PD 2005 _383: Children and Infants with Bacterial Meningitis – Acute Management</i>
PCP number	<i>NSW PD 2005 _383:PCP 3 Management of acute bacterial meningitis in infants and children</i>
Sites where PCP applies	Manning Hospital- Emergency Department (ED)
Target audience	Clinicians in ED where infants and children are clinically suspected of having meningitis
Description	Provides evidence based practice guidelines for the treatment of infants and children with bacterial meningitis
Subject	Acute management of bacterial meningitis in children and infants
Keywords	Acute management bacterial meningitis children infants
Replaces existing PCP	No
Document number and/or name of superseded document/s	
Related Legislation (including OHS legislation), Australian Standards, NSW Health Policy or Circular, other HNEH Documents, Professional Guidelines, Codes of Practice or Ethics: NSW Health Paediatric Clinical Practice Guidelines	
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Summary	
<ul style="list-style-type: none"> • This PCP is a guideline in the assessment of the severity and management of bacterial meningitis in infants and children. • This PCP provides guidelines on appropriate transfer/retrieval based on clinical assessment and response to treatment or discharge planning • PCP includes fact sheet for parent information. 	
Distribution:	General Manager, DON, Paediatrician, NUM ED, ED Physician, Director of Medical Services CYP&FCN Stream Leaders
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PCP authorised by:	Professor Trish Davidson - Clinical Leader- CYP&FCN
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TRIM Number:	Pending

Hunter New England Area Health Service

Manning Hospital

**PAEDIATRIC BACTERIAL MENINGITIS
MANAGEMENT**

Surname _____ Sex _____

Given Names _____

DOB _____ MRN _____
AFFIX PT LABEL HERE

ALERT

Whilst Viral meningitis occurs more commonly than bacterial meningitis, it is often difficult to distinguish between the two. It is prudent to assume a bacterial cause in initial management. All of these pts should be discussed with the Paediatrician early

AGE	CLINICAL PRESENTATION
< 3 MONTHS <input type="checkbox"/>	<input type="checkbox"/> Fever <input type="checkbox"/> High pitched cry <input type="checkbox"/> Apnoea <input type="checkbox"/> Hypothermia <input type="checkbox"/> Lethargy <input type="checkbox"/> Poor feeding <input type="checkbox"/> Bulging Fontanelle <input type="checkbox"/> Altered mental state <input type="checkbox"/> vomiting <input type="checkbox"/> Irritability <input type="checkbox"/> Seizures
> 3 MONTHS <input type="checkbox"/>	<input type="checkbox"/> Fever (only 50% on initial presentation) <input type="checkbox"/> Kernig's sign <input type="checkbox"/> Lethargy <input type="checkbox"/> Anorexia, nausea +/- vomiting <input type="checkbox"/> Seizures (20-30% incidence) <input type="checkbox"/> Neck stiffness (60-80%, more useful > 3 yrs) <input type="checkbox"/> Irritability <input type="checkbox"/> Altered mental state (variable) <input type="checkbox"/> Photophobia (older children)

MANAGEMENT:

INITIAL RESUSCITATION	Assess and attend to Airway, Breathing, circulation and level of consciousness Treat seizures:- Administer Midazolam 0.15mg/kg IV/ IM or 0.3mg/kg intrabuccal/intranasal/rectal . Repeat at 5 minutes if seizure continues. If seizures continue consider a loading dose of Phenytoin (20mg/kg over 20min) Refer to seizure guidelines		
PATHOLOGY	Blood Glucose (including initial dextrostix), UEC, CRP, FBC, Blood Culture		
FLUIDS	Give bolus 0.9% Sodium chloride @ 20 ml/kg over 10-20 min if signs of shock. Rpt as necessary. Ongoing fluid management to be discussed with the Paediatrician.		
LUMBAR PUNCTURE	CONTACT PAEDIATRICIAN. <input type="checkbox"/> Not to be attempted by MO in-experienced in Paediatric LP procedure Contraindications: (Patient instability, suspicion of space occupying lesion, bleeding diathesis, skin infection or anatomical abnormality at LP site) - Then consider commencing empiric antibiotic Cover (see below). Reassess at later stage for LP If no contraindications perform LP (Senior MO only or Paediatrician) Send CSF-request urgent microscopy, culture and sensitivity, protein, glucose If CSF Turbid and/or high clinical suspicion commence empiric antibiotic cover. Otherwise await CSF analysis: IF CSF normal / equivocal and low clinical suspicion: discuss with paediatrician IF CSF normal / equivocal but high clinical suspicion: commence empiric antibiotic cover IF CSF Abnormal commence empiric antibiotic cover		
Empiric Antibiotic Cover	Age	Organisms	Antibiotic Regime
	0-3 months	Group B Strep, E.coli, Listeria monocytogenes	<input type="checkbox"/> Ampicillin 50mg/kg (max 2g) IV Q4hrly + <input type="checkbox"/> Cefotaxime 50mg/kg (max 2g) IV Q6hrly
	> 3months – 15 years	Neisseria meningitidis, Haemophilus influenzae	<input type="checkbox"/> Ceftriaxone 100mg/kg (max 4g) IV Daily
	Any Age	Strep pneumoniae -if gram +ive diplococci in stain -gram stain -ive but high suspicion for bacterial meningitis -LP contraindicated	ADD <input type="checkbox"/> Vancomycin 15mg/kg (max 500mg) IV Q6hrly (don't give as a single agent)
STEROIDS	> 3 months	Dexamethasone 0.15 mg/kg Q6H (max 10mg/kg/day) - Administer as a single push before antibiotics are given	

DOCTOR _____ SIGNED: _____ DATE: _____