

Antibiotic Prophylaxis Guidelines for Pediatric Neurosurgical Procedures

Updated December 2023

Procedure/Condition	Antibiotic Prophylaxis	Duration
Placement of CSF Shunt	Cefazolin ¹	Perioperative only. No more than 24 hours
Placement of an external ventricular drain ² or pressure monitor	Cefazolin ¹	Perioperative only; No more than 24 hours.
Open fracture ³	Cefazolin ¹	24 hours post repair
Basilar skull fracture	None	
CSF leak ⁴	None	
Pneumocephaly	None	
Craniotomy	Cefazolin ¹	Perioperative only. Stop after surgery.
Surgery for non-penetrating skull fracture	Cefazolin ¹	Perioperative only. Stop after surgery.

¹Vancomycin if colonized with MRSA or severe allergic reaction to penicillin or cephalosporins

²When using antibiotic-coated EVD catheters, can consider 48 hours of antibiotic prophylaxis

³See Harbor-UCLA Clinical Care Guideline for Antibiotic Management of Open Fractures in Pediatric Patients for grade III fractures or heavily contaminated wounds

⁴For patients with a CSF leak, pneumococcal vaccination is recommended. PCV20 if not previously given

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