ENT Infections

INFECTION	MOST LIKELY ORGANISMS	THERAPY CATEGORY	ANTIMICROBIALS	COMMENTS
ACUTE OTITIS MEDIA • **less than 3 months** • community-acquired	Strep *pneumoniae* M. *catarrhalis* H. *influenzae* Group A strep Group B strep *Enterobacterales*	First line	**Cefotaxime 50 mg/kg/dose IV q6-8h** (max. 2 g/dose) (*refer to Lexicomp for neonatal doses*) **OR** **Ceftriaxone 50 mg/kg/dose IV q24h** (max. 2 g/dose)*	Pediatric ENT and ID consultations suggested. Full septic work-up should be done in neonates. *If ceftriaxone use is considered in a neonate, a baseline bilirubin must be obtained and followed closely. If hyperbilirubinemia arises on ceftriaxone, consideration for an alternative agent (e.g. cefotaxime) should be made
ACUTE OTITIS MEDIA • **3 months and above** • community-acquired	Strep *pneumoniae* M. *catarrhalis* H. *influenzae* Group A strep	First line	**Amoxicillin 80-90 mg/kg/DAY PO DIVIDED q12h** (max. 4 g/**DAY**) **If antibiotic use in last 30 days or purulent conjunctivitis:** **Amoxicillin-clavulanate 90 mg/kg/DAY PO DIVIDED q12h** (max. 3 g/**DAY**)* **If unable to tolerate oral fluids and/or vomiting and/or failed 2nd line therapy (amoxicillin-clavulanate):** **Ceftriaxone 50 mg/kg/dose IV/IM q24h** (max. 1 g/dose)	Watchful waiting without antibiotics for 48 hours is an option in children 6 months and older with a non-severe presentation (mild otalgia for less than 48 hours, fever less than 39 °C and absence of tympanic membrane perforation) and reliable caregivers. *Other option: **Amoxicillin 45 mg/kg/DAY PO DIVIDED q12h** **+** **Amoxicillin-clavulanate 45 mg/kg/DAY PO DIVIDED q12h**

		Penicillin allergy	**Cefuroxime axetil 15 mg/kg/dose PO q12h (max. 500 mg/dose)** **If unable to tolerate oral fluids and/or vomiting and/or failed 2nd line therapy:** **Ceftriaxone 50 mg/kg/dose IV/IM q24h** (max. 1 g/dose)	(max. 3 g (amox)/**DAY**) Duration: • Less than 2 years: 10 days • 2 years and above: - non-severe: 5-7 days - severe: 10 days If ceftriaxone used: • 1 dose may be sufficient if rapid symptomatic improvement; • 3 doses required if failure of 2nd line oral therapy
ACUTE MASTOIDITIS • no intracranial extension • community-acquired	Strep *pneumoniae* M. *catarrhalis* H. *influenzae* Group A strep Staph *aureus*	First line	**Ceftriaxone 50 mg/kg/dose IV q24h** (max. 2 g/dose)	Duration: 4 weeks • initial phase intravenous until clinically improved • step down to PO antibiotic to complete course
		Penicillin allergy	same	
ACUTE BACTERIAL SINUSITIS • community-acquired	Strep *pneumoniae* M. *catarrhalis* H. *influenzae* Group A strep	First line	**Amoxicillin 80-90 mg/kg/DAY PO DIVIDED q12h** (max. 4 g/**DAY**) **If antibiotic use in last 30 days:** **Amoxicillin-clavulanate 90 mg/kg/DAY PO DIVIDED q8h** (max. 4 g (amox)/**DAY**)*	*Other option: **Amoxicillin 45 mg/kg/DAY PO DIVIDED q8h** **AND** **Amoxicillin-clavulanate 45 mg/kg/DAY PO DIVIDED q8h** (max. 4 g (amox)/**DAY**) Duration: 10-14 days
		Penicillin allergy	**Cefuroxime axetil 15 mg/kg/dose PO q12h** (max. 500 mg/dose)	

ACUTE CERVIAL LYMPHADENITIS • community-acquired	Staph *aureus* Group A strep Anaerobes (if poor oral hygiene)	First line	**Mild-moderate:** **Cephalexin 50-100 mg/kg/DAY PO DIVIDED q8h** (max. 4 g/ **DAY**) **OR** **if suspected odontogenic source**: **Amoxicillin-clavulanate 40-45 mg/kg/DAY PO DIVIDED q8h** (max. 1500 mg/**DAY**) **<u>Severe or Inpatient</u>:** **Cefazolin 50 mg/kg/DAY IV DIVIDED q8h** (max. 2g/dose) **OR** **If suspected odontogenic source:** **Amoxicillin-clavulanate 25 mg/kg/dose IV q8h** (max. 1000 mg/dose **<u>Ambulatory (via Pediatric Day Center)</u> – ONLY IF unable to take/tolerate oral antibiotic and not meeting criteria for hospitalization**: **Ceftriaxone 50 mg/kg/dose IV q24h** (max. 2 g/dose)	

		Penicillin allergy	**Mild-moderate:** **Cefuroxime axetil 15 mg/kg/dose PO q12h** (max. 500 mg/dose) **OR** **if suspected odontogenic source:** **Clindamycin 40 mg/kg/DAY IV/PO DIVIDED q8h** (max. 900 mg/dose IV and 600 mg/dose PO) **Severe:** **<u>Inpatient</u>:** **Cefazolin 50 mg/kg/DAY IV DIVIDED q8h (**max. 2 g/dose) **If suspected odontogenic source, ADD:** **Clindamycin 40 mg/kg/DAY IV/PO DIVIDED q8h** (max. 900 mg/dose IV and 600 mg/dose PO) **<u>Ambulatory (via Pediatric Day Center)</u> – ONLY IF unable to take/tolerate oral antibiotic and not meeting criteria for hospitalization**: **Ceftriaxone 50 mg/kg/dose IV q24h** (max. 2 g/dose)	

INFECTION	MOST LIKELY ORGANISMS	THERAPY CATEGORY	ANTIMICROBIALS	COMMENTS
BACTERIAL TRACHEITIS • community-acquired	Staph *aureus* GAS Strep *pneumoniae* H. *influenzae*	First line	**Amoxicillin-clavulanate 25 mg/kg/dose IV q8h** (max. 1000 mg/dose)	
		Penicillin allergy	**Cefuroxime 50 mg/kg/dose IV q8h** (max. 1500 mg /dose)	
EPIGLOTTITIS • community-acquired	H. *influenzae* Strep *pneumoniae* Staph *aureus* GAS	First line	**Amoxicillin-clavulanate 25 mg/kg/dose IV q8h** (max. 1000 mg/dose) **AND** **If MRSA is suspected**: **Vancomycin* 15 mg/kg/dose IV q6h**	* Refer to the Guidelines for the prescription and the therapeutic drug monitoring of vancomycin at the Montreal Children's Hospital
		Penicillin allergy	**Ceftriaxone 75 mg/kg/dose IV q24h (max. 2 g/dose)**	
PARAPHARYNGEAL/ RETROPHARYNGEAL INFECTIONS • community-acquired	Staph *aureus* GAS Anaerobes	First line	**Amoxicillin-clavulanate 25 mg/kg/dose IV q8h** (max. 1000 mg/dose) **If severe/life-threatening (e.g. concomitant sepsis, septic shock, airway compromise), use instead: Piperacillin-tazobactam 240-300 mg/kg/DAY IV DIVIDED q6-8h** (max. 4 g/dose)	
		Penicillin allergy	**Cefazolin 50 mg/kg/DAY IV DIVIDED q8h** (max. 2 g/dose) **AND** **Clindamycin 40 mg/kg/DAY IV/PO DIVIDED q8h** (max. 900 mg/dose IV and 600 mg/dose PO) **If severe/life-threatening (e.g. concomitant sepsis, septic shock, airway compromise), use**	

			instead: **Meropenem 20 mg/kg/dose IV q8h** (max. 2 g/dose)	

REFERENCES:

Empiric Antimicrobial Therapy Guide: Version 9, May 2025