

Guide to Amoxicillin Dosing

Spectrum

Yes	Enterococcus sp Beta-lactamase-negative Haemophilus influenzae Streptococcus species Streptococcus pneumoniae Listeria monocytogenes Susceptible Gram-negative organisms (Escherichia coli, Klebsiella pneumoniae, Proteus sp)
No	Anaerobes Staphylococcus aureus (MSSA & MRSA) Resistant gram-negative bacilli

Amoxicillin Dosing

High dose: 90 mg/kg/day

- Recommended in circumstances where suspicion for resistant *Streptococcus pneumoniae* is high, examples may include:
 - AOM
 - Bacteremia
 - CAP
- Infections in locations that are challenge to penetrate (ie osteomyelitis)
- < 4% of local CW *Streptococcus pneumoniae* was resistant (2022 data)

Standard dose: 45 mg/kg/day

- Recommended where coverage of resistant *Streptococcus pneumoniae* is not needed, examples may include:
 - Pharyngitis/tonsillitis
 - UTI

Adverse Event Risk

	Standard Dose amoxicillin	High Dose amoxicillin
Diarrhea	8.7%	13.8%
Rash	2.9%	6.5%
Diaper Dermatitis	6.4%	-

Hum SW, Shaikh KJ, Musa SS, Shaikh N. Adverse events of antibiotics used to treat acute otitis media in children: a systematic meta-analysis. J Pediatr. 2019

Maximum High Doses**

- General Dosing Maximum
 - Suspension (400 mg/5 mL):
 - BID 1600 mg (20 mL/dose)
 - TID 1000 mg (12.5 mL/dose)
 - Tablets/Capsules:
 - BID 1500 mg (3x 500 tablets/dose)
 - TID 1000 mg (2x 500mg tablets/dose) *OR* 875 mg (1 tablet/dose)
 - Chewable tablets*:
 - BID 1500 mg (6 tablets/dose)
 - TID 1000 mg (4 tablets/dose)
- AOM Maximum
 - Suspension (400 mg/5 mL): BID 1000 mg (12.5 mL/dose)
 - Tablets/Capsules: BID 1000 mg (2x 500mg tablets/dose) *OR* 875 mg (1 tablet/dose)
 - Chewable tablets: BID 1000 mg (4 tablets/dose)

*Insurance coverage variable, verify coverage before prescribing.
 ** Select clinical scenarios may justify a maximum of 4,000 mg/dose.

Dosing Frequency

- TID preferred*:
 - CAP
 - Bacteremia
 - UTI
 - BID recommended:
 - AOM
 - Pharyngitis/tonsillitis (daily appropriate)
- * TID dosing optimizes time of killing and is generally preferred in severe disease. BID dosing may improve compliance and may be necessary in some social situations.

Available Formulations

- | | |
|---|---|
| <ul style="list-style-type: none"> - Suspension*: <ul style="list-style-type: none"> - 200 mg/5 mL - 400 mg/5 mL - Capsules: <ul style="list-style-type: none"> - 250 mg - 500 mg | <ul style="list-style-type: none"> - Tablets: <ul style="list-style-type: none"> - 500 mg - 875 mg - Chewable Tablets: <ul style="list-style-type: none"> - 250 mg |
|---|---|

* 125 mg/5mL suspension is available, but not carried at CW inpatient pharmacy, as typical doses result in high volumes

Maximum Standard Doses

- General Dosing Maximum
 - Suspension (400 mg/5 mL):
 - BID 1000 mg (12.5 mL/dose)
 - TID 1000 mg (12.5 mL/dose)
 - Tablets/capsules:
 - BID 1000 mg (2x 500mg tablets/dose) *OR* 875 mg (1 tablet/dose)
 - TID 1000 mg (2x 500 mg tab/dose) *OR* 875 mg (1 tablet/dose)
 - Chewable Tablets*:
 - BID 1000 mg (4 tablets/dose)
 - TID 1000 mg (4 tablets/dose)
- Pharyngitis Maximum
 - Suspension (400 mg/5 mL): Daily 1000 mg (12.5 mL/dose)
 - Tablets/Capsules: Daily 1000 mg (2x 500mg tablets/dose)
 - Chewable tablets*: Daily 1000 mg (4 tablets/dose)

*Insurance coverage variable, verify coverage before prescribing.

Dose rounding has occurred in efforts to optimize dosing and simplify administration for families. Recommendations are intended to provide a framework for decision making, adherence is voluntary.

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Original: 10/2023

Last revised: 04/2026

Process owner: Antimicrobial Stewardship Program