Guide to Amoxicillin-Clavulanate (Augmentin®) Dosing

Formulations are not interchangeable: Multiple amoxicillin-clavulanate formulations are available to allow for clavulanate dose adjustments

Spectrum

Yes

Anaerobes
Enterococcus sp
Haemophilus influenzae
Listeria monocytogenes
Methicillin-sensitive Staphylococcus aureus (MSSA)
Moraxella catarrhalis
Streptococci sp
Some gram-negative organisms (e.g. Escherichia coli, Klebsiella pneumoniae, Proteus sp)

No

Methicillin-resistant Staphylococcus aureus (MRSA)
Pseudomonas
Resistant gram-negative bacilli

Amoxicillin-Clavulanate Dosing

Dose in milligrams is based on amoxicillin component

High dose: 90 mg/kg/day

- Recommended in circumstances where suspicion for resistant *Streptococcus pneumoniae* is high, examples may include:
  - AOM
  - CAP
  - Preseptal/Orbital cellulitis
- < 4% of local Children's Wisconsin Streptococcus pneumoniae is resistant (2022 data)

Standard dose: 45 mg/kg/day

- Recommended where coverage of resistant *Streptococcus pneumoniae* is <u>not</u> needed, examples may include:
  - Appendicitis
  - Animal Bite wound prophylaxis
  - Dental Infections
  - Skin and Soft Tissue Infections
  - UTI

Clavulanate doses limited to a maximum (10 mg/kg/day or 375 mg/day) to minimize gastrointestinal side effects

Adverse Event Risk

	Standard Dose amoxicillin	High Dose amoxicillin	High Dose amox-clav
Diarrhea	8.7%	13.8%	18.9%
Rash	2.9%	6.5%	4.9%
Diaper Dermatitis	6.4%	-	14.8%

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 [Data for standard dose amoxicillin-clavulanate unavailable].

4:1 Formulation: Recommended for renal insufficiency (CrCl <30 mL/min) and neonates.

Dosing Frequency

- TID preferred, examples include**:
  - CAP
  - Preseptal/Orbital cellulitis
  - UTI
- BID recommended, examples include:
  - AOM (see dosing box below)
  - Appendicitis
  - Animal Bite wound prophylaxis

** 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.

High Dose Formulation

- Suspension: 600mg-42.9 mg/5mL (14:1) [Augmentin ES®]
- Tablets: 875-125mg (7:1)*

Maximum Doses**

- Suspension
  - BID: 1500 mg-107.2 mg (12.5 mL/dose)
  - TID: 960 mg-68.6 mg (8 mL/dose)
- Tablets
  - BID: 875-125 mg (1 tablet/dose)
  - TID: 875 mg-125 mg (1 tablet/dose)

**Augmentin XR® 1000 mg-62.5 mg (16:1)/tablet is unlikely to be covered by insurance, therefore Augmentin 875 mg-125 mg (7:1)/tablet is recommended, despite being standard formulation/standard dose. This may be clinically appropriate in regions with low Streptococcus pneumoniae resistance and/or for outpatient therapy.*
*** Select clinical scenarios may justify doses up to 4,000 mg amoxicillin component*

AOM Maximum Doses

- Suspension (600mg-42.9 mg/5mL (14:1)): BID 960 mg-68.6 mg (8 mL/dose)
- Tablets: BID 875 mg (1 tablet/dose)

Standard Dose Formulation

- Suspension: 400 mg-57 mg/5mL (7:1)
- Tablets: 875 mg-125 mg (7:1)
- Chewable Tablets: 400 mg-57 mg (7:1)***

Maximum Doses

- Suspension
  - BID: 880mg-125.4mg (11 mL/dose)
  - TID: 880mg-125.4mg (11 mL/dose)
- Tablets
  - BID: 875mg-125mg (1 tablet/dose)
  - TID: 875mg-125mg (1 tablet/dose)
- Tablets (chewable)***
  - BID: 800mg-114mg (2 tablets/dose)
  - TID: 800mg-114mg (2 tablets/dose)

****Insurance coverage variable, verify coverage before prescribing.*

Dosing amoxicillin-clavulanate is complicated. Often desired doses are not achievable using tablet formulations. Optimal amoxicillin doses may result in excessively high clavulanate doses. To combat these challenges and simplify dosing, inconsistences exist between formulations and high/standard dosing. Recommendations are intended to provide a framework for decision making, adherence is voluntary.

Original: 10/2023
Last revised: 06/2026
Process owner: Antimicrobial Stewardship Program