

# Amoxicillin and Amoxicillin-clavulanic acid Therapeutic Alternatives in Pediatrics

Due to shortages in oral liquid formulations of amoxicillin and amoxicillin-clavulanic acid, alternative treatment strategies may be required. An oral suspension made from amoxicillin capsules will be available in AHS, but amoxicillin-clavulanic acid oral liquids remain unavailable. Availability in community pharmacies will vary, but if unavailable some alternative formulations and antibiotics are provided below.

| <b>Table 1. For “Regular Dose” Amoxicillin, if suspension unavailable- 40-75 mg/kg/day</b>  |   |  |                        |                 |
|---|---|--|------------------------|-----------------|
| Weight  | Suggested dosage using capsules*  |  | Dose range (mg/kg/day) |                 |
| < 8.5 kg  | Use alternative antibiotics listed here: <a href="#">Managing critical drug shortages in clinical practice</a>   <a href="#">Canadian Paediatric Society (cps.ca)</a> |  |                        |                 |
| 8.5-17 kg   | 250 mg TID  |  | 44-88                  |                 |
| 17 kg and up  | 500 mg TID  |  | </= 88                 |                 |
| <b>Table 2. For “High Dose” Amoxicillin, if suspension unavailable- 80-100 mg/kg/day</b>  |   |  |                        |                 |
| < 7.5 kg  | Use alternative antibiotics listed here: <a href="#">Managing critical drug shortages in clinical practice</a>   <a href="#">Canadian Paediatric Society (cps.ca)</a> |  |                        |                 |
| 7.6-9 kg  | 250 mg TID  |  | 83-100                 |                 |
| 9.1-15 kg   | 500 mg <b>BID</b>   |  | 67-109                 |                 |
| 15.1-20 kg  | 500 mg TID  |  | 75- 100                |                 |
| 20.1-28 kg  | 750 mg TID  |  | 80-107                 |                 |
| 28.1 kg and up  | 1000 mg TID   |  | </= 107                |                 |
| <b>Table 3. For “Regular Dose” Amoxicillin-clavulanic acid- 40-75 mg/kg/day amoxicillin and 5-12 mg/kg/day clavulanic acid e.g. UTI</b> |   |  |                        |                 |
|   | 875/125 Amoxi-clav tablet<br>(¼ tab= 219 mg amox, 31.25 mg clav)  | 500/125 Amoxi-clav tablet<br>(¼ tab= 125 mg amox, 31.25 mg clav) | Dose range (mg/kg/day) |                 |
|   |   |  | Amoxicillin            | Clavulanic acid |
| Under 7.5 kg  | Use alternative antibiotics listed here: <a href="#">Managing critical drug shortages in clinical practice</a>   <a href="#">Canadian Paediatric Society (cps.ca)</a> |  |                        |                 |
| 7.5-10 kg   |   | ¼ tab TID  | 37.5-50                | 9.5-12.5        |
| 10.1-16 kg  | ¼ tab TID   |  | 43-65                  | 5.8-9.5         |
| 16.1-18 kg  |   | ½ tab TID  | 41-46                  | 10.4-11.6       |
| 18.1-32 kg  | ½ tab TID   |  | 41-73                  | 5.8-10.3        |
| 32 kg and up  |   | 1 tab TID  | Up to 46               | Up to 11.7      |

| <b>Table 4. For “High Dose” Amoxicillin-clavulanic acid- 90 mg/kg/day amoxicillin and 5-12 mg/kg/day clavulanic acid</b> |   |  |                        |                 |
|--|---|--|------------------------|-----------------|
| e.g. High risk acute otitis media (AOM) or failure of 1 <sup>st</sup> line therapy for AOM                               |   |  |                        |                 |
| Note: must combine amoxicillin and amoxicillin-clavulanic acid products  |   |  |                        |                 |
|  | Using 875/125 Amoxi-clav tablet<br>(¼ tab= 219 mg amox, 31.25 mg clav)  | Using 500/125 Amoxi-clav tablet<br>(¼ tab= 125 mg amox, 31.25 mg clav) | Dose range (mg/kg/day) |                 |
|  |   |  | Amoxicillin            | Clavulanic acid |
| Below 10kg   | Use alternative antibiotics listed here: <a href="#">Managing critical drug shortages in clinical practice   Canadian Paediatric Society (cps.ca)</a> |  |                        |                 |
| 10-12.5kg  | ¼ tab BID +<br>23mg/kg/dose BID of amox liquid  | ¼ tab BID +<br>33mg/kg/dose BID of amox liquid                         | 81-90                  | 5-6             |
| 12.6-15kg  | ¼ tab TID +<br>15mg/kg/dose TID of amox liquid  | ¼ tab TID +<br>22mg/kg/dose TID of amox liquid                         | 89-97                  | 6-7.5           |
| 15.1-17.5kg  | ½ tab BID +<br>16mg/kg/dose BID of amox liquid  | ½ tab BID +<br>28mg/kg/dose BID of amox liquid                         | 82-90                  | 7-8.2           |
| 17.6-22.5kg  | ½ tab BID +<br>20mg/kg/dose BID of amox liquid  | ½ tab BID +<br>31mg/kg/dose BID of amox liquid                         | 79-90                  | 5.6-7           |
| Above 22.5 kg  | 1 tab BID   |  | 50- 77.4               | 7- 11           |

\* Capsules can be opened and mixed with a small amount (2-3 tbsp) of palatable food/drink

If the above options are not available or suitable, alternative antibiotic options are listed here: [Managing critical drug shortages in clinical practice | Canadian Paediatric Society \(cps.ca\)](#) \*

\*Notes: Avoid use of cephalexin for UTIs in febrile children. Treat bacterial sinusitis as for acute otitis media.

**All antibiotic oral suspension recommendations are subject to availability at the time; multiple agents are in shortage situations.**

Reviewed by: Otto Vanderkooi, Joan Robinson (Peds ID); Susan Fryters, Marcel Romanick, Deonne Dersch-Mills, Teagan Zeggil (Pharmacy)

December 5, 2022