

MDR-TB Weight-Based Dosing Chart for Children

		Group 1: Oral first-line anti-TB drugs			Group 2:	Group 3: Fluoroquinolones			Group 4: Oral bacteriostatis agents				Group 5:		Target Dose									
Target Dose	Ethambutol (15-25 mg/kg)		Pyrazinamide (30-40 mg/kg)		Injectable anti-TB drugs (injectable agents or parenteral agents)	Levofloxacin (15-20 mg/kg)		Moxifloxacin (7.5-10 mg/kg)		Olofloxacin (15-20 mg/kg)	Cycloserine/ Terizidone (15-20 mg/kg)		PAS (150-200 mg/kg)		Protonamide/ Ethionamide (15-20 mg/kg)	Anti-TB drugs with unclear efficacy or unclear role in MDR-TB treatment	Isoniazid High Dose (15-20 mg/kg)	Available Formulations						
Available Formulations	100 mg tablet	Suspend 400mg tab in 8 mL of water for a 50 mg/mL suspension	400 mg tablet	500 mg tablet		250 mg tablet	25 mg/mL suspension	400 mg tablet	20 mg/mL suspension	200 mg tablet	250 mg capsule	1 capsule in 10 mL water	Daily	Twice Daily	250 mg tablet		100 mg tablet							
Wt (kg)	Consult with a clinician experienced in pediatric MDR-TB prescribing for neonates (<28 days of age) and infants weighing <3 kg																		Wt (kg)					
<3																			<3					
3-3.9	1 tab	2 mL	.25 tab	.25 tab	To illustrate dose calculation, take the example of a child that weighs 6.9 kg. Both the low and high doses for the child's weight are calculated. For kanamycin: Low dose: 15 mg/kg x 6.9 kg = 103 mg High dose: 20 mg/kg x 6.9 kg = 138 mg A convenient dosing is then chosen between the two numbers. Select a dose between the two numbers and towards the higher number. In this case, choose: 125 mg per day, single dose. Calculate the number of mL to draw up in the syringe based on the mg/mL concentration of the preparation.	.25 tab	2.5 mL	not recommended	1.5 mL	.5 tab	.25 cap	2.5 mL	500 mg	250 mg	.25 tab	Group 5 drugs are not recommended by the WHO for routine use in MDR-TB treatment because their contribution to the efficacy of MDR regimens is unclear. Their role in pediatric MDR-TB treatment is even less clear. Most of these drugs are expensive, and some require intravenous administration, and/or have severe side effects. However, they can be used in cases where adequate regimens are impossible to design with the medications from Groups 1-4. They should be used in consultation with an expert in the treatment of DR-TB.	.5 tab	3-3.9						
4-4.9																								4-4.9
5-5.9																								
6-6.9																						6-6.9		
7-7.9			.5 tab										.5 cap	5 mL	1500 mg		750 mg	.5 tab				7-7.9		
8-8.9	2 tabs	4 mL	.5 tab	.5 tab																		8-8.9		
9-9.9																								9-9.9
10-10.9																								
11-11.9	3 tabs	6 mL	1 tab	1 tab																			11-11.9	
12-12.9																								12-12.9
13-13.9																						13-13.9		
14-14.9	4 tabs	8 mL	1.5 tabs	1.5 tabs																14-14.9				
15-15.9																						15-15.9		
16-16.9																							16-16.9	
17-17.9	5 tabs	10 mL	2 tabs	2 tabs																17-17.9				
18-18.9																							18-18.9	
19-19.9																								19-19.9
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29-29.9																				29-29.9				

For preventive regimens, consult with experts regarding optimal regimen construction. The doses of isoniazid, ethambutol, and fluoroquinolones for preventive regimens are the same as in this dosing chart.



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v1.1

Group 2	Streptomycin	Amikacin	Kanamycin	Capreomycin
Daily Dose	20-40 mg/kg once daily	15-20 mg/kg once daily	15-20 mg/kg once daily	15-20 mg/kg once daily
Maximum Daily Dose	1000 mg	1000 mg	1000 mg	1000 mg

Group 5	Clofazimine (CFZ)	Amoxicillin-clavulanate (AMX-CLV)	Meropenem (MPN)	Linezolid (LZD)	Clarithromycin (CLR)
Daily Dose	2-3 mg/kg once daily; if the child is <25kg give 100mg every second day	80 mg/kg in two divided doses based on the amoxicillin component	20-40 mg/kg IV every 8 hours	10 mg/kg dose twice daily for children <10 years of age 300 mg daily for children >10 years of age (also give vitamin B6)	7.5 mg/kg twice daily
Maximum Daily Dose	200 mg	4000 mg amoxicillin and 500 mg clavulanate	6000 mg	600 mg	1000 mg

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Target Dose																Target Dose
Available Formulations																Available Formulations
Wt (kg)																Wt (kg)
<3																<3
3-3.9																3-3.9
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