

# MDR-TB Weight-Based Dosing Chart for Children

Target Dose	Group 1: Oral first-line anti-TB drugs				Group 2: Injectable anti-TB drugs (injectable agents or parental agents)	Group 3: Fluoroquinolones				Group 4: Oral bacteriostatis agents				Group 5:		Target Dose			
	Ethambutol (15-25 mg/kg)		Pyrazinamide (30-40 mg/kg)			Levofloxacin (15-20 mg/kg)	Moxifloxacin (7.5-10 mg/kg)		Ofloxacin (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	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	Available Formulations		
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: 30 mg/kg x 6.9 kg = 207 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: 200 mg per day, single dose.  Calculate the number of mL to draw u pin 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			2 mL	.25 tab		2.5 mL	2 mL		5 mL		.5 cap	5 mL	1000 mg	500 mg	.5 tab		4-4.9		
5-5.9			.5 tab	.5 tab		5.0 mL	2.5 mL		5 mL		.5 cap	5 mL	1500 mg	750 mg	.5 tab		5-5.9		
6-6.9			2 tabs	4 mL		.5 tab	.5 tab		5 mL		1 tab	.75 cap	7.5 mL	2000 mg	1000 mg		.75 tab	1 tab	6-6.9
7-7.9						1 tab	1 tab		10 mL		1 tab	1 cap	1 cap	2500 mg	1250 mg		1 tab	1 tab	7-7.9
8-8.9	3 tabs	6 mL	1 tab	1 tab	10 mL	1 tab	1 cap	1 cap	2500 mg	1250 mg	1 tab	3 tabs	2 tabs	8-8.9					
9-9.9			1.5 tabs	1.5 tabs	15 mL	.5 tab	1.5 tabs	1.5 caps	15 caps	3000 mg	1500 mg		1.5 tabs	2 tabs	9-9.9				
10-10.9			1.5 tabs	1.5 tabs	15 mL	.5 tab	1.5 tabs	1.5 caps	15 caps	4000 mg	2000 mg		1.5 tabs	3 tabs	10-10.9				
11-11.9			2 tabs	2 tabs	20 mL	.5 tab	2 tabs	2 caps	20 mL	5000 mg	5000 mg		2 tabs	4 tabs	11-11.9				
12-12.9			2 tabs	2 tabs	20 mL	.5 tab	2 tabs	2 caps	20 mL	6000 mg	6000 mg		2 tabs	4 tabs	12-12.9				
13-13.9	4 tabs	8 mL	2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	5000 mg	5000 mg	2 tabs	5 tabs	3 tabs	13-13.9					
14-14.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		3 tabs	14-14.9					
15-15.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		3 tabs	15-15.9					
16-16.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		3 tabs	16-16.9					
17-17.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		3 tabs	17-17.9					
18-18.9	5 tabs	10 mL	2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	5000 mg	5000 mg	2 tabs	5 tabs	4 tabs	18-18.9					
19-19.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		4 tabs	19-19.9					
20-20.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		4 tabs	20-20.9					
21-21.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		4 tabs	21-21.9					
22-22.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		4 tabs	22-22.9					
23-23.9	5 tabs	10 mL	2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	5000 mg	5000 mg	2 tabs	5 tabs	5 tabs	23-23.9					
24-24.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		5 tabs	24-24.9					
25-25.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		5 tabs	25-25.9					
26-26.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		5 tabs	26-26.9					
27-27.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		5 tabs	27-27.9					
28-28.9	5 tabs	10 mL	2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	5000 mg	5000 mg	2 tabs	5 tabs	5 tabs	28-28.9					
29-29.9			2 tabs	2 tabs	20 mL	2 tabs	2 caps	20 mL	6000 mg	6000 mg	2 tabs		5 tabs	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.

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



<http://sentinel-project.org>

Chart developed by Chelsie GawneMark