

The Fetus and the Neonatal Infant: Digestive System
Dosages of Antibiotics Commonly Used in Newborns*

Antibiotics	Routes	Dosages (mg/kg) and Intervals of Administration				
		Weight < 1200g	Weight 1200~2000g		Weight > 2000g	
		Age 0~4 wk*	Age 0~7 days	> 7 days	Age 0~7 days	> 7 days
Amikacin ⊙	IV, IM	7.5 q12h	7.5 q12h	7 q8h	10 q12h	10 q8h
Ampicillin	IV, IM					
Meningitis		50 q12h	50 q12h	50 q8h	50 q8h	50 q6h
Other diseases		25 q12h	25 q12h	25 q8h	25 q8h	25 q6h
Aztreonam	IV, IM	30 q12h	30 q12h	30 q8h	30 q8h	30 q6h
Cefazolin	IV, IM	20 q12h	20 q12h	20 q12h	20 q12h	20 q8h
Cefotaxime	IV, IM	50 q24h	50 q24h	50 q8h	50 q12h	50 q8h
Ceftazidime	IV, IM	50 q12h	50 q12h	50 q8h	30 q8h	50 q8h
Ceftriaxone	IV, IM	50 q12h	50 q12h	50 q24h	50 q24h	75 q24h
Cephalothin	IV	20 q12h	20 q12h	20 q8h	20 q8h	20 q6h
Chloramphenicol ●	IV, PO	22 q24h	25 q24h	25 q24h	25 q24h	25 q12h
Clindamycin	IV, IM, PO	5 q12h	5 q12h	5 q8h	5 q8h	5 q6h
Erythromycin	PO	10 q12h	10 q12h	10 q8h	10 q12h	10 q8h
Gentamicin ⊙	IV, IM	2.5 q18~24h	2.5 q12h	2.5 q8h	2.5 q12h	2.5 q8h
Kanamycin	IV, IM	7.5 q12h	7.5 q12h	7 q8h	10 q12h	10 q8h
Methicillin	IV, IM					
Meningitis		50 q12h	50 q12h	50 q8h	50 q8h	50 q6h
Other diseases		25 q12h	25 q12h	25 q8h	25 q8h	25 q6h

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Metronidazole	IV, PO	7.5 q48h	7.5 q24h	7.5 q12h	7.5 q12h	15 q12h
Mezlocillin	IV, IM	75 q12h	75 q12h	75 q8h	75 q12h	75 q8h
Oxacillin	IV, IM	25 q12h	25 q12h	30 q8h	25 q8h	37.5 q6h
Nafcillin	IV	25 q12h	25 q12h	25 q8h	25 q8h	37.5 q6h
Netilmicin Δ	IV, IM	2.5 q18~24h	2.5 q12h	2.5 q8h	2.5 q12h	2.5 q8h
Penicillin G	IV					
Meningitis		50000 U q12h	50000 U q12h	75000 U q8h	50000 U q8h	50000 U q6h
Other diseases		25000 U q12h	25000 U q12h	25000 U q8h	25000 U q8h	25000 U q6h
Penicillin G	IM					
Benzathine			50000 U (one dose)	50000 U (one dose)	50000 U (one dose)	50000 U (one dose)
Procaine			50000 U q24h	50000 U q24h	50000 U q24h	50000 U q24h
Ticarcillin	IV, IM	75 q12h	75 q12h	75 q8h	75 q8h	75 q6h
Tobramycin \odot	IV, IM	2.5 q18~24h	2 q12h	2 q8h	2 q12h	2 q8h
Vancomycin \blacksquare	IV	15 q24h	10 q12h	10 q8h	15 q12h	10 q8h

Recommendations for infants weighing < 1000g based on Prober et al: *Pediatr Infect Dis J* 9:111, 1990.

*Adapted from Nelson JD: 1991-92 Pocketbook of Pediatric Antimicrobial Therapy, 9th ed. ©1991, The Williams & Wilkins Co., Baltimore.

\odot Aminoglycoside levels should be monitored if therapy continues > 3 days. Optimal peak levels 6~8 $\mu\text{g}/\text{mL}$, trough less than 2 $\mu\text{g}/\text{mL}$.

•Serum levels are highly variable. Chloramphenicol should be given to newborns only if serum levels can be

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monitored.

△ 0.5 mg/kg/24 hr can increase to 1 mg/kg/24 hr if needed or give every other day. Treat for cumulative dose of 10~30 mg/kg.

■ Because of variable pharmacokinetics, vancomycin levels should be monitored if therapy continues > 3 days. Optimal peak levels 20~30 µg/mL, trough less than 10 µg/mL.