

新生兒抗生素劑量表 Neonatal Antibiotics Dosage Schedules

20220206 修訂

		Body weight <1kg	1-2kg	>2kg
Penicillin G: general infection (IU/kg/dose)				
	Age≤7d	5 萬 IU/kg Q12H	5 萬 IU/kg Q12H	5 萬 IU/kg Q8H
	8-14 d	5 萬 IU/kg Q12H	5 萬 IU/kg Q8H	5 萬 IU/kg Q6H
	15-28 d	5 萬 IU/kg Q8H	5 萬 IU/kg Q8H	5 萬 IU/kg Q6H
Penicillin G: meningitis				
	Age≤7d	12.5 萬 IU/kg Q12H	12.5 萬 IU/kg Q12H	12.5 萬 IU/kg Q8H
	8-14 d	12.5 萬 IU/kg Q12H	12.5 萬 IU/kg Q8H	12.5 萬 IU/kg Q6H
	15-28 d	12.5 萬 IU/kg Q12H	12.5 萬 IU/kg Q8H	12.5 萬 IU/kg Q6H
Penicillin G :				
Congenital Syphilis: 5 萬 IU/kg/dose Q12H during the first 7 days of life, and thereafter 5 萬 IU/kg/dose Q8H, for a total of 10 days				
GBS meningitis: 50-60 萬 IU/kg/day (參考馬偕)				
Age≤ 7days 25- 45 萬 IU/kg/day divided Q8H; Age: 8-28 days 45-50 萬 IU/kg/day divided Q6H (參考 NeoFax)				
Amoxicillin 500mg+ Clavulanic acid 100mg (Soonmelt): the dose is based on TOTAL drug not the amoxicillin component Oral: Age ≥7days 30mg/kg/dose q8h IV: 30mg/kg/dose, PMA≤ 37weeks Q12H; PMA 37-44weeks Age≤ 6days Q12H, Age ≥7days Q8H				
Oxacillin: general infection				
	Age≤7d	25 mg/kg Q12H	25 mg/kg Q12H	25 mg/kg Q8H
	8-14 d	25 mg/kg Q12H	25 mg/kg Q8H	25 mg/kg Q6H
	15-28 d	25 mg/kg Q8H	25 mg/kg Q8H	25 mg/kg Q6H
Oxacillin: meningitis				
	Age≤7d	50 mg/kg Q12H	50 mg/kg Q12H	50 mg/kg Q8H
	8-14 d	50 mg/kg Q12H	50 mg/kg Q8H	50 mg/kg Q6H
	15-28 d	50 mg/kg Q8H	50 mg/kg Q8H	50 mg/kg Q6H
Cefazolin: general infection				
	Age≤7d	25 mg/kg Q12H	25 mg/kg Q12H	50 mg/kg Q12H
	8-14 d	25 mg/kg Q8H	25 mg/kg Q8H	50 mg/kg Q8H
	15-28 d	25 mg/kg Q8H	25 mg/kg Q8H	50 mg/kg Q8H
Cefotaxime (Claforan): general infection (100-150 mg/kg/day)				
	Age≤7d	50 mg/kg Q12H	50 mg/kg Q12H	50 mg/kg Q12H
	8-14 d	50 mg/kg Q12H	50 mg/kg Q8H	50 mg/kg Q8H
	15-28 d	50 mg/kg Q8H	50 mg/kg Q8H	50 mg/kg Q8H
Cefotaxime: meningitis ; 200 mg/kg/day ; interval 比照上述表格所示 (參考馬偕)。				
Meningitis: use smaller doses and longer intervals for neonates <2 kg (參考 Neofax) Age≤7days 100-150mg/kg/day Q12-Q8H 8-28 days 150-200mg/kg/day Q8H-Q6H				
Ceftriaxone (Ceftriaxone Kabi): Sepsis: Use cefotaxime in place of ceftriaxone if hyperbilirubinemia or				

receiving calcium-containing intravenous solutions				
		Body weight <1kg	1-2kg	>2kg
	Age≤7d	50 mg/kg QD	50 mg/kg QD	50 mg/kg QD
	8-14 d	50 mg/kg QD	50 mg/kg QD	50 mg/kg QD
	15-28 d	50 mg/kg QD	50 mg/kg QD	75 mg/kg QD
Ceftriaxone: meningitis: In neonates, IDSA guidelines suggest cefotaxime as the preferred nonpseudomonal third-generation cephalosporin; no ceftriaxone dosing is provided in the guidelines.				
Ceftazidime (CetaZINE): general infection				
	Age≤7d	50 mg/kg Q12H	50 mg/kg Q12H	50 mg/kg Q12H
	8-14 d	50 mg/kg Q12H	50 mg/kg Q8H	50 mg/kg Q8H
	15-28 d	50 mg/kg Q8H	50 mg/kg Q8H	50 mg/kg Q8H
Ceftazidime: Meningitis: use smaller doses and longer intervals for neonates <2 kg Age≤7days 100-150 mg/kg/day divided Q12-Q8H 8-28 days 150 mg/kg/day divided Q8H				
	Age≤7d	50 mg/kg Q12H	50 mg/kg Q12H	50 mg/kg Q12H
	8-14 d	50 mg/kg Q8H	50 mg/kg Q8H	50 mg/kg Q8H
	15-28 d	50 mg/kg Q8H	50 mg/kg Q8H	50 mg/kg Q8H
Cefepime: mild to moderate infection: 30mg/kg Q12H				
Cefepime: pneumonia or meningitis (due to Pseudomonas aeruginosa or Enterobacter spp)				
	Age≤7d	50 mg/kg Q12H	50 mg/kg Q12H	50 mg/kg Q12H
	8-14 d	50 mg/kg Q12H	50 mg/kg Q8H	50 mg/kg Q8H
	15-28 d	50 mg/kg Q8H	50 mg/kg Q8H	50 mg/kg Q8H
Piperacillin 2G+ Tazobactam 0.25G (Tapimycin): Dose base on piperacillin component				
	Age≤7d	100 mg/kg Q12H	100 mg/kg Q12H	100 mg/kg Q8H
	8-14 d	100 mg/kg Q12H	100 mg/kg Q8H	80 mg/kg Q6H
	15-28 d	100 mg/kg Q8H	100 mg/kg Q8H	80 mg/kg Q6H
Meropenem: general infection				
	Age≤7d	20 mg/kg Q12H	20 mg/kg Q12H	20 mg/kg Q8H
	8-14 d	20 mg/kg Q12H	20 mg/kg Q8H	30 mg/kg Q8H
	15-28 d	20 mg/kg Q8H	20 mg/kg Q8H	30 mg/kg Q8H
Meropenem: meningitis				
	Age≤7d	40 mg/kg Q12H	40 mg/kg Q12H	40 mg/kg Q8H
	8-14 d	40 mg/kg Q12H	40 mg/kg Q8H	40 mg/kg Q8H
	15-28 d	40 mg/kg Q8H	40 mg/kg Q8H	40 mg/kg Q8H
Clindamycin: general infection dose 5 mg/kg/dose; infusion > 30-60min				
	Age≤7d	5 mg/kg Q12H	5 mg/kg Q12H	5 mg/kg Q8H
	8-14 d	5 mg/kg Q12H	5 mg/kg Q8H	5 mg/kg Q6H
	15-28 d	5 mg/kg Q8H	5 mg/kg Q8H	5 mg/kg Q6H
Metronidazole: Loading dose: 15 mg/kg; (參考 馬偕), IV drip> 0.5-1hour, at conc < 8mg/ml Maintenance dose: as below				
	Age≤7d	7.5 mg/kg QD	7.5 mg/kg Q12H	7.5 mg/kg Q8H
	8-14 d	7.5 mg/kg QD	7.5 mg/kg Q12H	10 mg/kg Q8H
	15-28 d	7.5 mg/kg QD	7.5 mg/kg Q12H	10 mg/kg Q8H
Acyclovir: this dosage for herpes simplex virus infection Treat localized infections for 14 days; disseminated or CNS infections for 21 days. Dilute to a final				

concentration ≤ 7 mg /mL; IV infusion over 60 minutes				
		Body weight <1kg	1-2kg	>2kg
	Age ≤ 7 d	20 mg/kg Q12H	20 mg/kg Q12H	20 mg/kg Q8H
	8-14 d	20 mg/kg Q12H	20 mg/kg Q8H	20 mg/kg Q8H
	15-28 d	20 mg/kg Q8H	20 mg/kg Q8H	20 mg/kg Q8H
Age-directed dosing: <div> <div>† Postmenstrual age (PMA) is gestational age plus postnatal age.</div> <div>PMA is the primary determinant of dosing interval with postnatal age as the secondary qualifier</div> <div>Renal function and drug elimination are strongly correlated with postmenstrual age.</div> </div>				
Ampicillin: general infection: 100 mg/kg/day Ampicillin: Group B streptococcal bacteremia (GBS) sepsis: 200mg/kg/day				
	PMA(weeks)	Postnatal (days)	Dose (參考上述)	Interval (hours)
	≤ 29	0-28		12
		≥ 29		8
	30 to 36	0-14		12
		≥ 15		8
	37 to 44	0-7		12
		≥ 8		8
	≥ 45	ALL		6
Ampicillin: GBS meningitis: 0-7 days: 200 to 300 mg/kg/day divided Q8H 8 days and older: 300 mg/kg/day divided Q6 H				
Gentamicin: Draw peak 30 min after completion infusion; draw trough just before the next dose (於第 4 個 dose 給藥前)				
	PMA(weeks)	Postnatal (days)	Dose(mg/kg)	Interval (hours)
	$\leq *29$	0 to 7	5	48
		8 to 28	4	36
		≥ 29	4	24
	30 - 34	0 to 7	4.5	36
		≥ 8	4	24
	35 - 44	ALL	4	24
*or significant asphyxia, PDA, or treatment with indomethacin				
Amikacin: Draw peak 30 min after completion infusion; draw trough just before next dose (於第 4 個 dose 給藥前)				
	PMA(weeks)	Postnatal (days)	Dose(mg/kg)	Interval (hours)
	$\leq *29$	0 to 7	18	48
		8 to 28	15	36
		≥ 29	15	24
	30 - 34	0 to 7	18	36
		≥ 8	15	24
	35 - 44	ALL	15	24
Vancomycin: Dilute to a final concentration ≤ 5 mg/mL; IV infusion over 90 minutes Draw trough level within 30 mins before the fourth dose. peak level 60 mins after end of infusion				

	PMA(weeks)	Postnatal (days)	sepsis 10mg/kg/dose meningitis 15mg/kg/dose	Interval (hours)
	≤29	0 to 14		18
		≥15		12
	30 to 36	0 to 14		12
		≥15		8
	37 to 44	0 to 7		12
		≥8		8
	≥45	ALL		6
Teicoplanin (Tagocid): loading dose 16 mg/kg/dose, followed by 8 mg/kg/dose QD				
Linezolid: Oral, IV. Bacteremia, community/ hospital-acquired pneumonia, skin infections. Vancomycin-resistant Enterococcus faecium (VREF) infection				
	Gest. Age (wks)	Post Natal (days)	Dose(mg/kg)	Interval(hours)
	<34	0 to 7	10	12
		≥8	10	8
	34-44	0-28	10	8
Fluconazole: Invasive Candidiasis Duration of therapy for candidemia: 2 weeks after documented clearance of Candida from the bloodstream and resolution of symptoms (without metastatic complications) Treatment: loading dose 25 mg/kg Prophylaxis: 3 mg/kg/dose, twice weekly , duration up to 6 weeks				
	Gest. Age (wks)	Post Natal (days)	Maintenance Dose(mg/kg)	Interval(hours)
	≤29	0 to 14	12	48
		≥15	12	24
	30 -44	0 to 7	12	48
		≥8	12	24

小兒科、藥劑科共同制訂

資料來源:

*Micromedex- Neofax · * Uptodate 2019,

*Pediatric & neonatal dosage handbook 2018

† [Remington and Klein's Infectious Diseases of the Fetus and Newborn Infant](#) 8th edit 2016

*馬偕醫院新生兒加護病房工作手冊 · 2018.