

LRI ED IV Phenytoin Infusion Guide: Patients >49kg

Do not use if patient is already taking Phenytoin . Use [children's version](#) of this aid if patient weighs <50kg

Notes

- Phenytoin is usually prescribed on NC Meds: Go to Emergency Medicine (ED) > Common scenarios (ED) > Seizures > Phenytoin, then select the dose appropriate for the patient's weight. **Use this aid only if NC is offline.**
- This guide is intended for use in conjunction with the UHL guideline [Management of status epilepticus in adults](#)
- Total infused dose (for those weighing 50 - 102.5kg) when using table below will be 20 (+/- 0.5) mg/kg up to a maximum of 2g (patients weighing 97.6kg or more will all receive 2g only)
- Phenytoin must only be given in the ER (resuscitation room)
- Continuous ECG monitoring must be in place and blood pressure and respiratory rate must be measured frequently
- Standard infusion rate (independent of patient weight or total dose) is **60mL/h** (i.e. giving 50mg/min)
- Stop infusion if low BP or bradycardia observed; once resolved restart at **30mL/h** (i.e. giving 25mg/min)
- Phenytoin is infused **NEAT**, as dilution may cause precipitation and is therefore discouraged by the manufacturer
- When given neat, an in-line filter is not required
- Flush IV line generously with 0.9% NaCl both before and after giving phenytoin**

Find required volume of **NEAT** Phenytoin in table below. **DO NOT dilute.**

Each vial contains 250mg in 5mL (i.e. 50mg/ml; **1mg = 0.02mL**). Draw up exact amount in a 60mL syringe.

Weight kg	Phenytoin dose		Infusion rate	
	20mg/kg		Normal - 60mL/h (delivers 50mg/min)	Slow - 30mL/h (delivers 25mg/min)
	Volume mL	Dose mg	Time infusion will take to complete (NB: for information only)	
50.0 - 51.2	20	1000	20	40
51.3 - 53.6	21	1050	21	42
53.7 - 56.0	22	1100	22	44
56.1 - 58.5	23	1150	23	46
58.6 - 60.9	24	1200	24	48
61.0 - 63.4	25	1250	25	50
63.5 - 65.8	26	1300	26	52
65.9 - 68.2	27	1350	27	54
68.3 - 70.7	28	1400	28	56
70.8 - 73.1	29	1450	29	58
73.2 - 75.6	30	1500	30	60
75.7 - 78.0	31	1550	31	62
78.1 - 80.4	32	1600	32	64
80.5 - 82.9	33	1650	33	66
83.0 - 85.3	34	1700	34	68
85.4 - 87.8	35	1750	35	70
87.9 - 90.2	36	1800	36	72
90.3 - 92.6	37	1850	37	74
92.7 - 95.1	38	1900	38	76
95.2 - 97.5	39	1950	39	78
97.6 & over	40	2000	40	80

Example prescription for 72.6kg patient

PARENTERAL INFUSIONS											
Date	Infusion Fluid		Additions to Infusion						Signatures		
	Type/Strength	Vol.	Medicine	Dose	Route	Time to run or ml/hr	Prescriber	Fluid Batch No.	Start Time	Given by	Checked by
28/03/19	50mg/mL	29mL	PHENYTOIN (neat)	1450mg	IV	60mL/h	Your Name				