

# Maximum Recommended Local Anaesthetic Doses (Adults)

[Queens Medical Centre Campus]

*These are recommended doses. Any doses of local anaesthetic drugs, administered into different areas of the body, contribute to an overall maximum dose for a particular patient. If the maximum recommended dose of one local anaesthetic has been reached no further local anaesthetic should be given. Absorption varies depending on injection site/method of administration, and blood levels may increase in the elderly and unwell patient. Actual maximum dosage may be less than stated above so adjust dose accordingly. Beware of the risks, clinical signs and management of Local Anaesthetic Systemic Toxicity (LAST). Further information can be found in the Clinical Guidelines Page <http://www.nuh.nhs.uk/healthcare-professionals/clinical-guidelines/> or via the NUH Guidelines App.*

Drug	Concentration (mg/ml)	Maximum dose (mg/kg)	Maximum volume (ml)								
			35 kg	40 kg	45 kg	50 kg	60 kg	70 kg	80 kg	90 kg	100 kg
(Levo)Bupivacaine 0.25%	2.5 mg/ml	2 mg/kg	28	32	36	40	48	56	60ml (150mg)		
(Levo)Bupivacaine 0.5%	5 mg/ml		14	16	18	20	24	28	30ml (150mg)		
(Levo)Bupivacaine 0.75%	7.5 mg/ml		9.3	10.6	12	13	16	18	20ml (150mg)		
Bupivacaine 0.25% with Adrenaline (1:200000)	2.5 mg/ml	2 mg/kg	28	32	36	40	48	56	60ml (150mg)		
Bupivacaine 0.5% with Adrenaline (1:200000)	5 mg/ml		14	16	18	20	24	28	30ml (150mg)		
Ropivacaine 0.2%	2 mg/ml	3 mg/kg	52.5	60	67.5	75	90	105	120	135	150
Ropivacaine 0.75%	7.5 mg/ml		14	16	18	20	24	28	32	36	40
Ropivacaine 1%	10 mg/ml		10.5	12	13.5	15	18	21	24	27	30

- Yellow Local Anaesthetic Systemic Toxicity Management Boxes can be found in the following locations on the QMC Campus:**
- EENT (Eye, Ear, Nose and Throat) Theatre Recovery
  - Main Theatre Recovery
  - Main Theatre 19
  - Obstetric Theatre Recovery
  - A-Floor Theatres (Cardiac Arrest Trolley)
  - D34
  - D35
  - PICU
  - E14 (Treatment Room)
  - Radiology (Cardiac Arrest Trolley)

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Drug	Concentration (mg/ml)	Maximum dose (mg/kg)	Maximum volume (ml)								
			35 kg	40 kg	45 kg	50 kg	60 kg	70 kg	80 kg	90 kg	100 kg
Lidocaine <b>1%</b>	10 mg/ml	<b>3 mg/kg</b>	10.5	12	13.5	15	18	20ml (200mg)			
Lidocaine <b>2%</b>	20 mg/ml		5.25	6	6.75	7.5	9	10ml (200mg)			
Lidocaine <b>1%</b> with Adrenaline (1:200000)	10 mg/ml	<b>7 mg/kg</b>	24.5	28	31.5	35	42	49	50ml (500mg)		
Lidocaine <b>2%</b> with Adrenaline (1:200000)	20 mg/ml		12.25	14	15.75	17.5	21	24.5	25ml (500mg)		
Prilocaine <b>1%</b>	10 mg/ml	<b>6 mg/kg</b>	21	24	27	30	36	40ml (400mg)			

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**References:**

- Peck T, Hill S, Williams M (2008). *Pharmacology for Anaesthesia and Intensive Care*. 3rd ed. Cambridge: Cambridge University Press.
- Smith A, Scart E, Sasada M (2011). *Drugs in Anaesthesia and Intensive Care*. 4th ed Oxford: Oxford University Press.
- *British National Formulary*. September 2014: National Institute of Clinical Excellence (NICE).