



## LOCAL ANESTHETIC MAXIMUM DOSAGES AND DURATION

70 kg (154 lbs) Healthy Patient

ANESTHETIC	DOSAGE, MAXIMUM <sup>2</sup>	DURATION <sup>5</sup>	MG/CART.	# CART. <sup>1,3,4</sup>
Articaine 4% 1:100,000 epinephrine (Septocaine)	490 mg (3.2mg/lb) (not recommended for young children)	60-90 min.	68 mg	7 cartridges
Bupivacaine 0.5% 1:200,000 epinephrine (Marcaine)	90 mg (0.6 mg/lb)	90-180 min.	9 mg	10 cartridges
Lidocaine 2% (Xylocaine, Lignospan, Octocaine)	400mg (2.0 mg/lb)	5-10 min.	36 mg	11 cartridges
Lidocaine 1:100,000 epinephrine	400mg (3.0 mg/lb)	60-90 min.	36 mg	11 cartridges
Mepivacaine 3% (Carbocaine, Isocaine, Scananest, Polocaine)	400mg (2.0 mg/lb)	20-40 min.	54 mg	7.5 cartridges
Mepivacaine 2% 1:20,000 neo-cobefrin	400mg (3.0 mg/lb)	60-90 min.	36 mg	11 cartridges
Prilocaine 4% (Citanest)	600mg (3.0 mg/lb)	10-60 min	72 mg	8.3 cartridges
Prilocaine 4% 1:200,000 epinephrine (Citanest)	600mg (3.6 mg/lb)	60-90 min.	72 mg	8.3 cartridges

- 1.) When combining two or more anesthetics, the maximum dose of each must be reduced accordingly.
- 2.) These values represent a synthesis of references listed below as well as my own recommendations.  
Use mg/lb values for children when body weight is less than 100 lbs.
- 3.) Maximum epinephrine dose is 200 mcg. (1:100,000 = 18 mcg per cart. & 1:50,000 = 36 mcg per cart.)
- 4.) Dosages are for normal healthy individuals. Reduce for elderly and debilitated.
- 5.) Pulpal. Soft tissue duration is generally three times longer.

1 Cartridge = 1.8ml

Sources: *PDR, Handbook of Local Anesthesia* (Malamed), *Regional Anesthesia of the Oral Cavity*, (Jastak and Yagiela),  
*Pharmacology and Therapeutics for Dentistry* (Neidle and Yagiela). 2004

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