

Lidocaine

ADULT DOSING – Lidocaine (100 mg/5 mL)

Indication	Route	Dose	Notes
Ventricular Fibrillation/ Pulseless Ventricular Tachycardic Cardiac Arrest	IV/IO	FIRST DOSE: 1.5 mg/kg (max dose 150mg) SECOND DOSE: 0.75 mg/kg (max dose 75mg) THIRD DOSE: 0.75 mg/kg (max dose 75mg)	First line antiarrhythmic in ACLS Repeat every 5-10 minutes PRN Maximum cumulative dose <i>from all sources</i> : 3 mg/kg
Ventricular Tachycardia with a Pulse		FIRST DOSE: 1.5 mg/kg (max dose 150mg) SECOND DOSE: 0.75 mg/kg (max dose 75mg) THIRD DOSE: 0.75 mg/kg (max dose 75mg)	Repeat every 5-10 minutes PRN Maximum cumulative dose <i>from all sources</i> : 3 mg/kg
Pain Associated with IO Infusion	IO	20mg (1 mL)	Consider diluting in 5 mL NS
Intubation of Awake Patient	Nebulized/IN	100mg (5 mL)	Nebulize 5 mL with 10 LPM for orotracheal intubation Atomize 5 mL LEAD PARAMEDIC ONLY

PEDIATRIC DOSING – Lidocaine (100 mg/5 mL)

Indication	Route	Dose	Notes
Ventricular Fibrillation/ Pulseless Ventricular Tachycardic Cardiac Arrest	IV/IO	FIRST DOSE: 1.5 mg/kg (max dose 150mg) SECOND DOSE: 0.75 mg/kg (max dose 75mg) THIRD DOSE: 0.75 mg/kg (max dose 75mg)	First line antiarrhythmic in ACLS Repeat every 5-10 minutes PRN Maximum cumulative dose <i>from all sources</i> : 3 mg/kg
Wide Complex Ventricular Tachycardia with a Pulse		FIRST DOSE: 1.5 mg/kg (max dose 150mg) SECOND DOSE: 0.75 mg/kg (max dose 75mg) THIRD DOSE: 0.75 mg/kg (max dose 75mg)	Repeat every 5-10 minutes PRN Maximum cumulative dose <i>from all sources</i> : 3 mg/kg
Pain Associated with IO Infusion	IO	0.5 mg/kg (max dose 20mg)	Consider diluting in 5 mL NS
Intubation of Awake Patient	Nebulized/IN	1.5 mg/kg (max dose 100mg)	Nebulize dose with 10 LPM for orotracheal intubation Atomize up to 5 mL LEAD PARAMEDIC ONLY

EMR	EMT	AEMT	Paramedic	Lead Paramedic
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Lidocaine

<u>Brand Names:</u>	Xylocaine
<u>Contraindications:</u>	Known hypersensitivity to lidocaine or other amide anesthetics, Wolff-Parkinson-White (WPW) Syndrome, High degree SA/AV nodal block, intraventricular conduction delay
<u>Pregnancy:</u>	Category B. Generally considered safe in pregnancy.
<u>Drug Class:</u>	Sodium channel blocker, Amide anesthetic, Class 1B antiarrhythmic
<u>Mechanism of action:</u>	By blocking sodium channels, lidocaine inhibits the nerve impulse initiation and conduction leading to local anesthesia. It also depresses the action potential phase 0 of the cardiac cycle (Class 1B antiarrhythmic).
<u>Adverse Reactions:</u>	Minor: Anxiety, Tremor, Confusion, Lightheaded, Nausea Major: Seizures, Respiratory arrest, Bradycardia, Hypotension, Cardiovascular collapse
<u>Precautions:</u>	--
<u>Guidelines:</u>	Cardiac – Ventricular Fibrillation (VF)/Pulseless Ventricular Tachycardia (pVT) Cardiac – Wide Complex Tachycardia with a Pulse Procedure: Drug Assisted Intubation Procedure: Intraosseous (IO) Access
<u>Notes:</u>	<ul style="list-style-type: none"> Maximum cumulative dose <i>from all sources</i>: 3 mg/kg. This includes if lidocaine is given for analgesia with IO placement.