



REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME

lidocaine



Effective Date: Dec 2011

Revised Date: Dec 2022

CLASSIFICATION
**Antiarrhythmic
Local Anesthetic**

OTHER NAMES
Xylocaine

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ADMINISTRATION POLICY:

IV Infusion Administration restricted to nurses experienced in ED/CARDIAC ROOM/ICU/PACU
 IV Bolus Administration restricted to nurses experienced in ED/CARDIAC ROOM/ICU/PACU
 Intraosseous (IO) Administration restricted to nurses experienced in ED/CARDIAC ROOM/ICU/PACU

RECONSTITUTION/DILUTION/ADMINISTRATION:

Available as: 2 g in 500 mL D5W (4 mg/mL) premixed bags
 IV bolus: 20 mg/mL – 5 mL prefilled syringe (100 mg)

IV bolus: Administer undiluted (using prefilled syringe) over 2 to 3 minutes

IV Infusion: Pump Library:

Drug Library	Dose Rate	Short Name	Care Unit
Yes	mg/min	lido2000	Critical Care
Drug	Diluent	Final Volume (VTBI)	Final Concentration
2000 mg premixed	500 mL D5W premixed*	500 mL	4 mg/mL
Clinical Advisory: High Alert			
Soft Low Dose Limit: 1 mg/min		Soft High Dose Limit: 4 mg/min	

*if premixed bags are unavailable:

- 1) remove 100 mL from a 500 mL D5W bag
- 2) add 2 grams of lidocaine = 20 x 5 mL prefilled syringe of 20 mg/mL
- 3) final concentration = 4 mg/mL

DOSAGE:

IV bolus: Cardiac arrest: Initial dose: 1 to 1.5 mg/kg. For refractory VF may give additional 0.5 to 0.75 mg/kg, repeat in 5 to 10 minutes; maximum 3 doses or total of 3 mg/kg

Perfusing Arrhythmia: Doses ranging from 0.5 to 0.75 mg/kg and up to 1 to 1.5 mg/kg may be used. Repeat 0.5 to 0.75 mg/kg every 5 to 10 minutes; maximum total dose: 3 mg/kg

IV infusion: 1 to 4 mg/minute

IO: Pain Management 40 mg slowly infuse over 2 minutes - allow to dwell in IO space for 1 minute. Flush with 5 to 10 ml of normal saline. Slowly administer an additional 20 mg over 1 minute (use preservative free 20 mg/mL – 5 mL prefilled syringe (100 mg)

Maximum single dose: IV bolus: 100 mg

Maximum daily dose : IV infusion: 4 mg/minute

Maximum rate : IV bolus: 50 mg/minute
IV infusion: 4 mg/minute

Maximum concentration: IV bolus: 20 mg/mL
IV infusion: 4 mg/mL



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STABILITY/COMPATIBILITY:

Stability of Final Admixture: 24 hours at room temperature

Compatibility: Compatible with normal saline, dextrose, combination dextrose-saline solutions, Lactated Ringer

PRECAUTIONS, POTENTIAL ADVERSE REACTIONS:

- Disorientation, confusion, psychosis, tremors, convulsions, respiratory arrest
- Myocardial depression, hypotension
- Thrombophlebitis, transient burning

ADDITIONAL NOTES AND NURSING CONSIDERATIONS:

- Continuous cardiac monitoring
- Monitor vital signs frequently
- Keep resuscitative equipment, including a defibrillator nearby
- Obtain rhythm strip prior to and post administration
- Possible cross sensitivity with other local anesthetics
- Decreased dosage may be required in patients with heart failure or liver disease
- It is not usually necessary to continue the infusion for more than 24 hours. If the infusion continues beyond 24 hours the dosage should be reduced by 50% to avoid accumulation of the drug and potential toxicity.
- Elderly patients: May be prone to increased CNS and cardiovascular side effects