

LIDOCAINE (Xylocaine®)**Classification:** Antidysrhythmic agent**Action:** Suppresses ventricular ectopy by stabilizing the myocardial cell membrane.**Indications:**

1. Cardiac arrest with ventricular fibrillation or pulseless ventricular tachycardia
2. Post conversion or defibrillation of ventricular rhythms with base contact.
3. Ventricular tachycardia with pulse present
4. Symptomatic/malignant ventricular ectopy
5. Pain Management following IO Placement

Contraindications:

1. 2° degree type II heart block
2. 3° degree heart block
3. Junctional bradycardia
4. Ventricular ectopy associated with bradycardia
5. Idioventricular rhythm
6. Known allergy to Lidocaine or sensitivity to other anesthetics (report to base).

Adverse Effects:**Cardiovascular**

Bradycardia
Hypotension
Arrest
Blurred vision

Respiratory

Dyspnea
Depression
Apnea

Gastrointestinal

Nausea/vomiting

Neurological

Dizziness
Drowsiness
Paresthesia
Restlessness
Slurred speech
Disorientation
Seizures
Lightheadedness
Tinnitus
Muscle twitching

Administration:**ADULT DOSE**

1. **V-Fib/pulseless V-Tach (with SLOEMSA Authorization):** 1.5 mg/kg IVP/IO, repeat every 3-5 minutes, not to exceed 3 mg/kg.
2. **V-Tach with a pulse (with SLOEMSA Authorization):** 1.5 mg/kg IVP, may repeat with 0.75 mg/kg IVP every 5-10 minutes, not to exceed 3 mg/kg.
3. **Pain Management following IO Placement:** 0.5mg/kg (total max dose of 40mg) slow IO push over 60 seconds.

PEDIATRIC DOSE

1. **V-Fib/pulseless V-Tach (with SLOEMSA Authorization):** 1 mg/kg IVP/IO. May repeat every 5 minutes, not to exceed 3 mg/kg.
2. **V-Tach with a pulse (with SLOEMSA Authorization):** 1 mg/kg IVP/IO, may repeat with 0.5 mg/kg IVP/IO every 5-10 minutes, not to exceed 3 mg/kg.
3. **Pain Management following IO Placement:** 0.5mg/kg (total max dose of 40mg) slow IO push over 60 seconds.

Onset: 30 - 90 seconds

Duration: 10 - 20 minutes

Notes:

- Lidocaine may be used as backup to Amiodarone with SLOEMSA authorization (using Policy #205 Attachment C) in cases where Amiodarone stock is unavailable. In cases when Lidocaine is substituted for Amiodarone, the minimum stock of Lidocaine shall mimic the same numbers as Amiodarone.
- In cases of premature ventricular contractions, assess need and treat underlying cause. Needs include: chest pain, syncope, R on T situations, multifocal and paired PVCs, bigeminy and trigeminy, and PVCs at 6-12 per minute. See appropriate protocols as needed.
- Lidocaine is to be administered no faster than 50mg/min, except in patients in cardiac arrest.