

**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

**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:** 1.5 mg/kg IVP/IO, repeat every 3-5 minutes, not to exceed 3 mg/kg
2. **V-Tach with a pulse:** 1.5 mg/kg IVP, may repeat with 0.75 mg/kg IVP every 5-10 minutes, not to exceed 3 mg/kg

**PEDIATRIC DOSE**

1. **V-Fib/pulseless V-Tach:** 1 mg/kg IVP/IO. May repeat every 5 minutes, not to exceed 3 mg/kg

**LIDOCAINE (Xylocaine®)—continued**

2. **V-Tach with a pulse:** 1 mg/kg IVP/IO, may repeat with 0.5 mg/kg IVP/IO every 5-10 minutes, not to exceed 3 mg/kg

**Onset:** 30 - 90 seconds

**Duration:** 10 - 20 minutes

**Notes:**

- 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.