## Lidocaine 1% or 2% ± Epinephrine (xylocaine)

**Indication(s):** Local anesthesia for chest tube insertion IAW the Tension Pneumothorax and Hemothorax Protocol.

Contraindications: Hypersensitivity to lidocaine.

**Precautions:** Local anesthetic procedures should not be used when there is inflammation and/or bacterial infection in the region of the proposed injection. Do not exceed recommended max dosing as systemic side effects (cardiac) are more likely to occur.

Adverse effects: In general, dose-related and may result from high plasma levels caused by overdosage, rapid absorption, or inadvertent intravascular injection. Most common: Vascular disorders: hypotension, hypertension.

Gastrointestinal disorders: nausea, vomiting.

Nervous system disorders: paresthesia, dizziness.

Cardiac disorders: bradycardia.

**Pharmacology:** Lidocaine inhibits the conduction of electrochemical nerve impulses by stabilizing the neuronal membrane, thereby effecting local anesthetic action. The onset of action is 1-5 minutes following infiltration and 5-15 minutes following other types of administration. The duration of anesthesia depends on the concentration of lidocaine used, the dose, and the type of block.

**Dosage and Administration**: Subcutaneous injection to a maximum to of 5mg/kg.