West Virginia Department of HEALTH

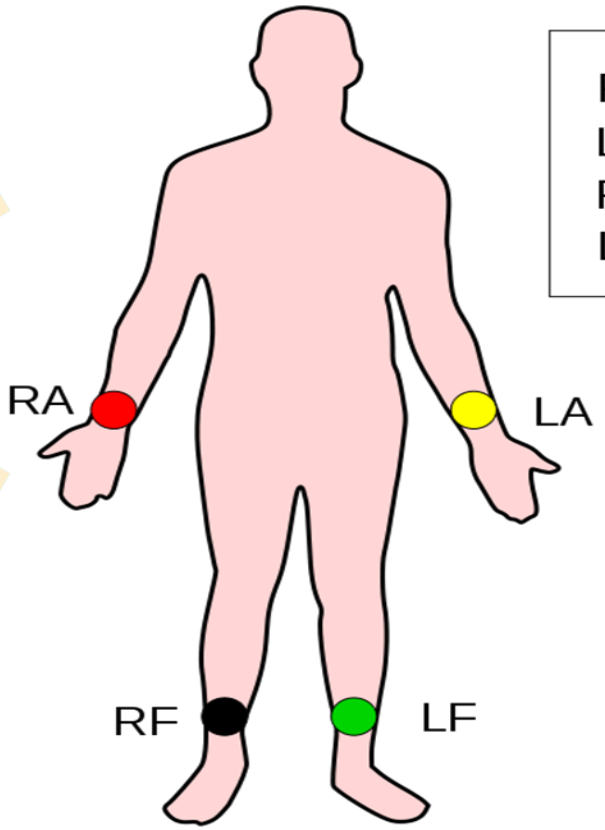
WVOEMS EMT Reciprocity

- **MODULE 1: 12 Lead Acquisition**
- **MODULE 2: Supraglottic Airway (iGel)**
- **MODULE 3: Epi Administration**
- **MODULE 4: Glucagon Administration**

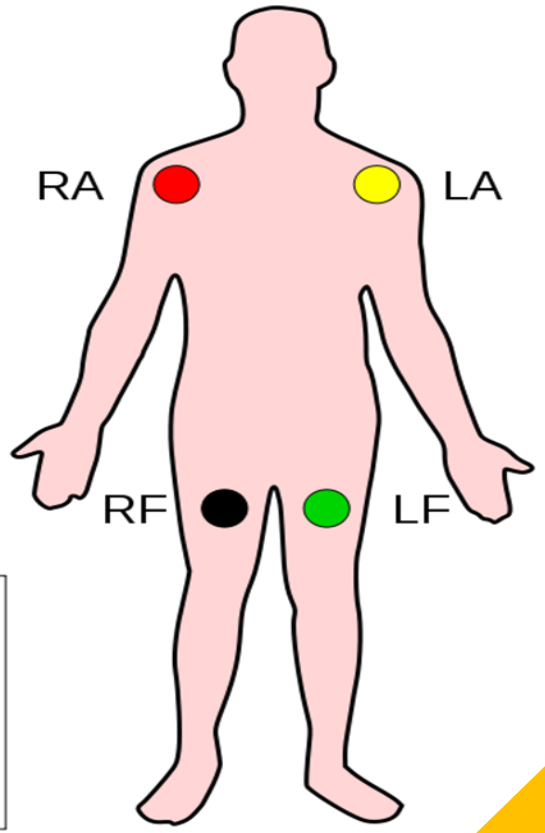
12-Lead Acquisition

Electrode Placement – Limb Leads
Electrode Placement – Precordial Leads
Electrode Placement – Right Side
Electrode Placement – Posterior

Limb Lead Placement

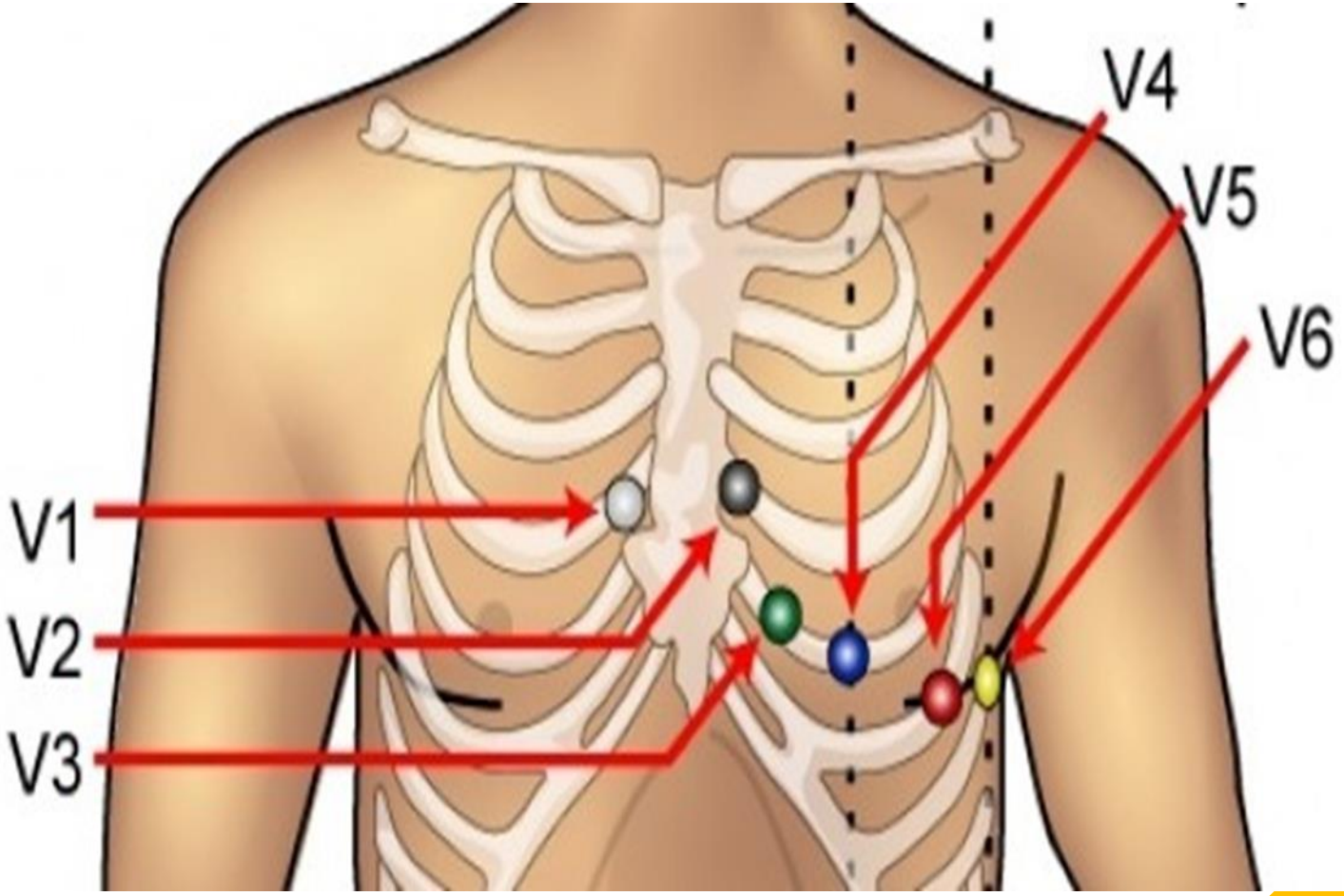


RA = Right Arm
LA = Left Arm
RF = Right Foot
LF = Left Foot

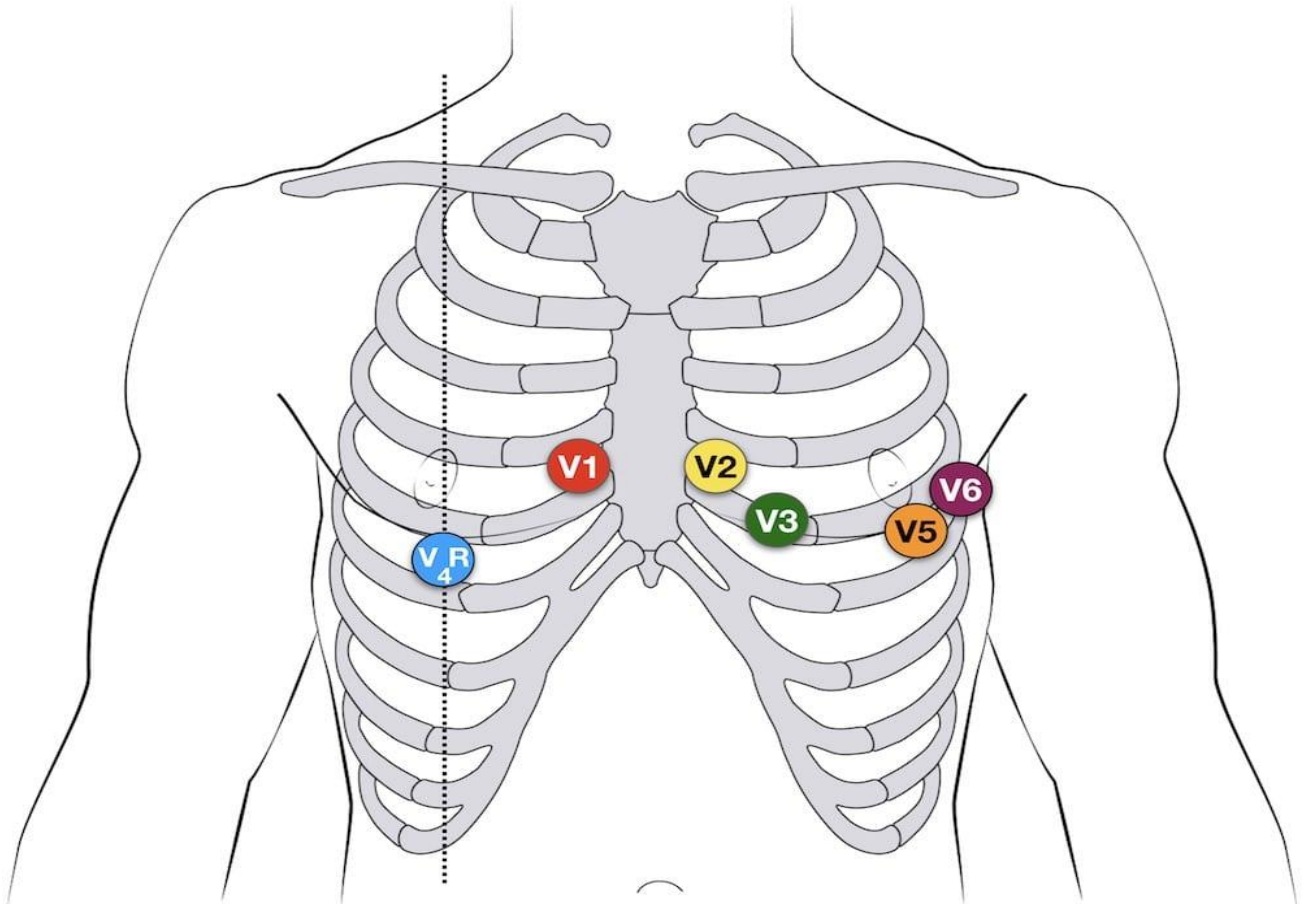


RA - Vermell
LA - Groc
RF - Negre
LF - Verd

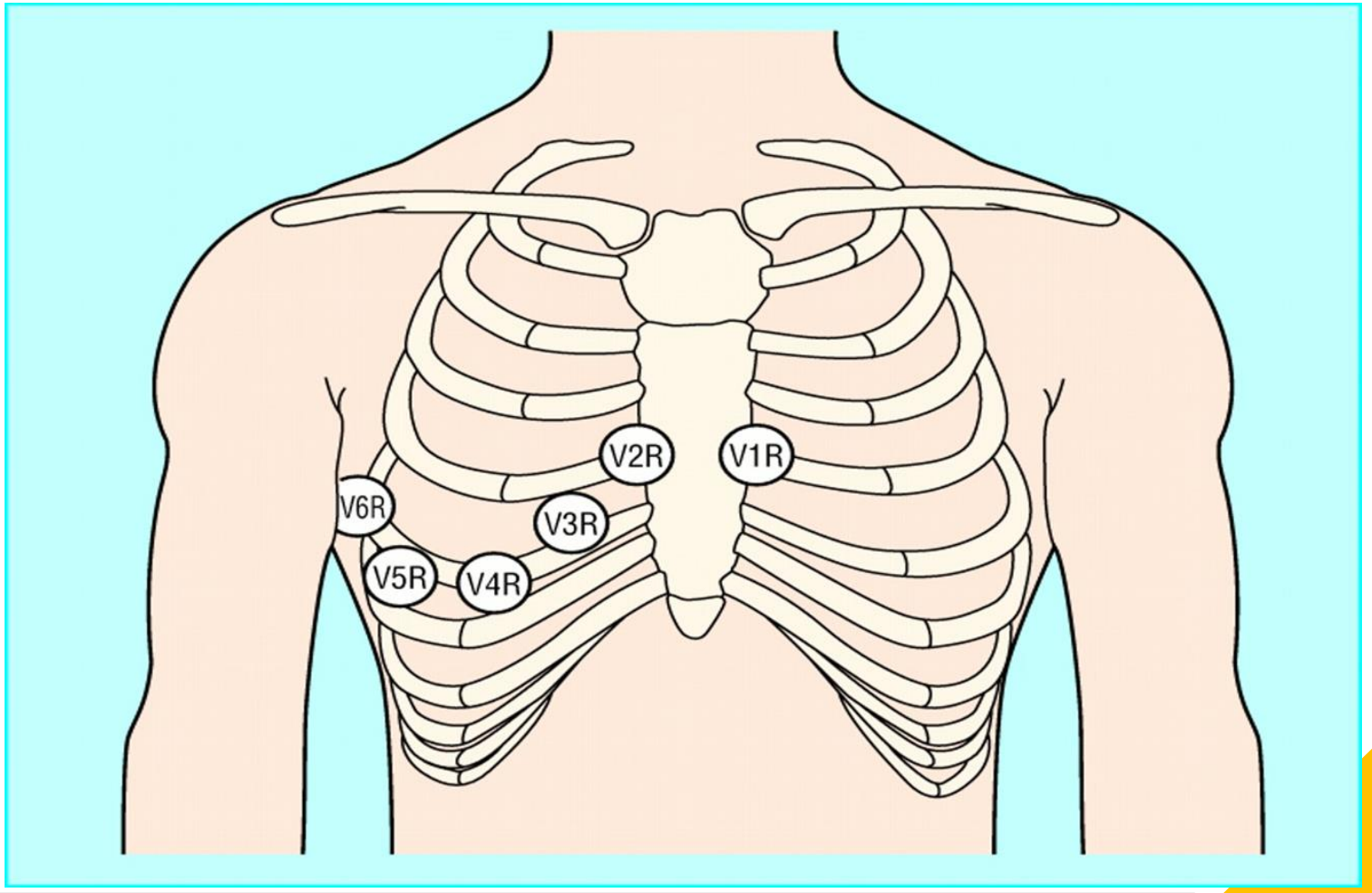
Precordial Lead Placement



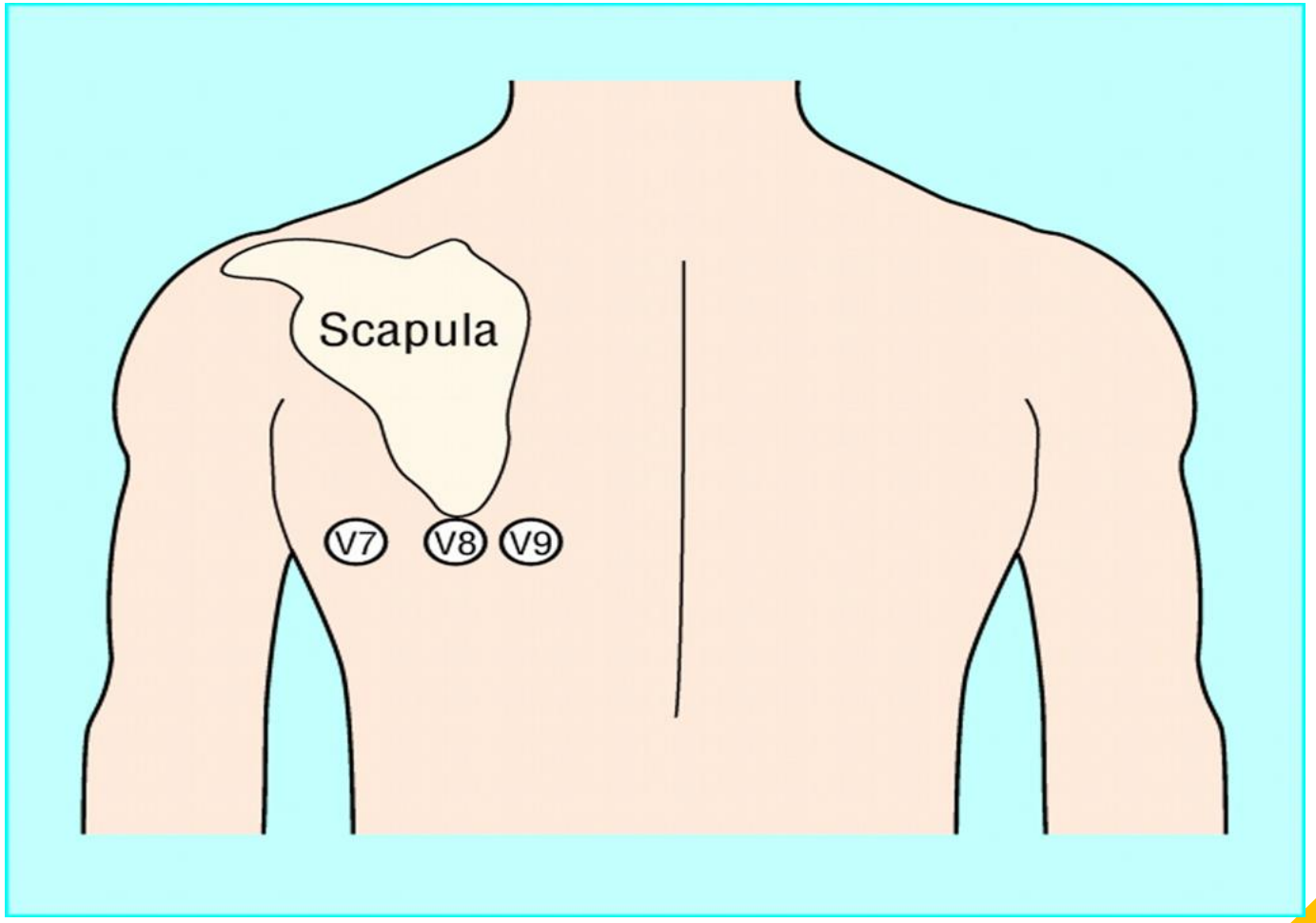
V4R Placement



Right Side Placement



Posterior Placement



Supraglottic Airway (iGel)

- Blind Insertion Airway Device
- Size is weight based using the ideal body weight chart
- Device comes in a kit with the iGel, lubricant, securement strap, and holder.

Supraglottic Airway (iGel)

Indications:

- Apneic patients with no paramedic on scene
- Patients where ventilatory assistance may be prolonged
- Secondary to failed endotracheal tube placement

Supraglottic Airway (iGel)

Contraindications:

- Responsive patient or intact gag reflex
- Know esophageal disease
- Caustic ingestion
- Foreign body airway obstruction
- Trismus
- Trauma
- Mass

Supraglottic Airway (iGel)

Epinephrine Administration

Epi-Pen:

- Epi 1:1000 concentration
- Pre-loaded auto injector
- Adult and pediatric

Intramuscular injection:

- Epi 1:1000 concentration
- Drawn up manually
- Injected IM

Epinephrine Administration

Epinephrine Administration

- Remove the auto-injector from its protective case
- Remove the safety caps of the injector
- Hold the injector firmly and keep fingers away from the tips of the device

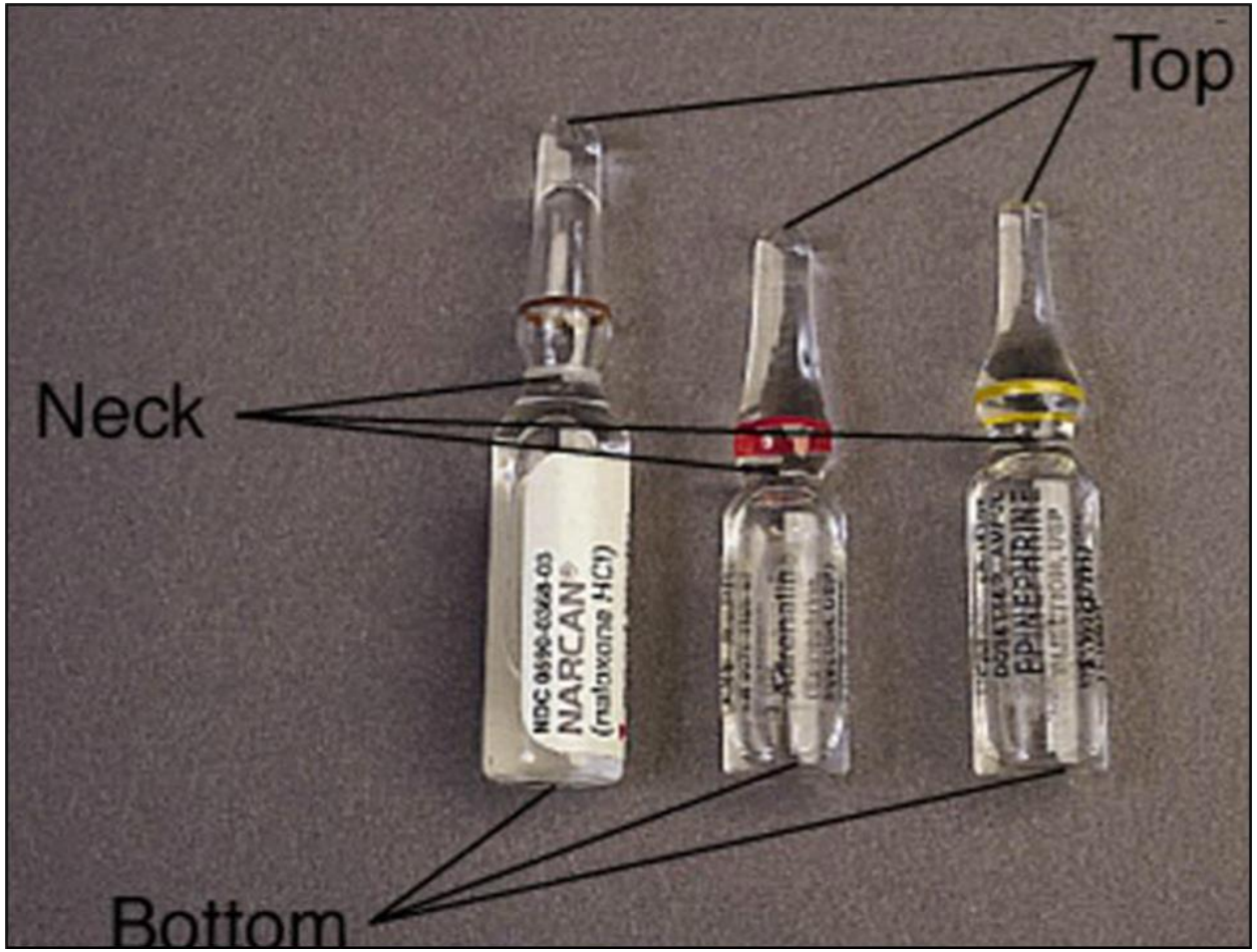
Epinephrine Administration

- Position the device at a 90-degree angle against the thigh
- Push hard enough to cause a click for some devices
- Hold the device firmly against the thigh for 2-10 seconds during administration

Epinephrine Administration

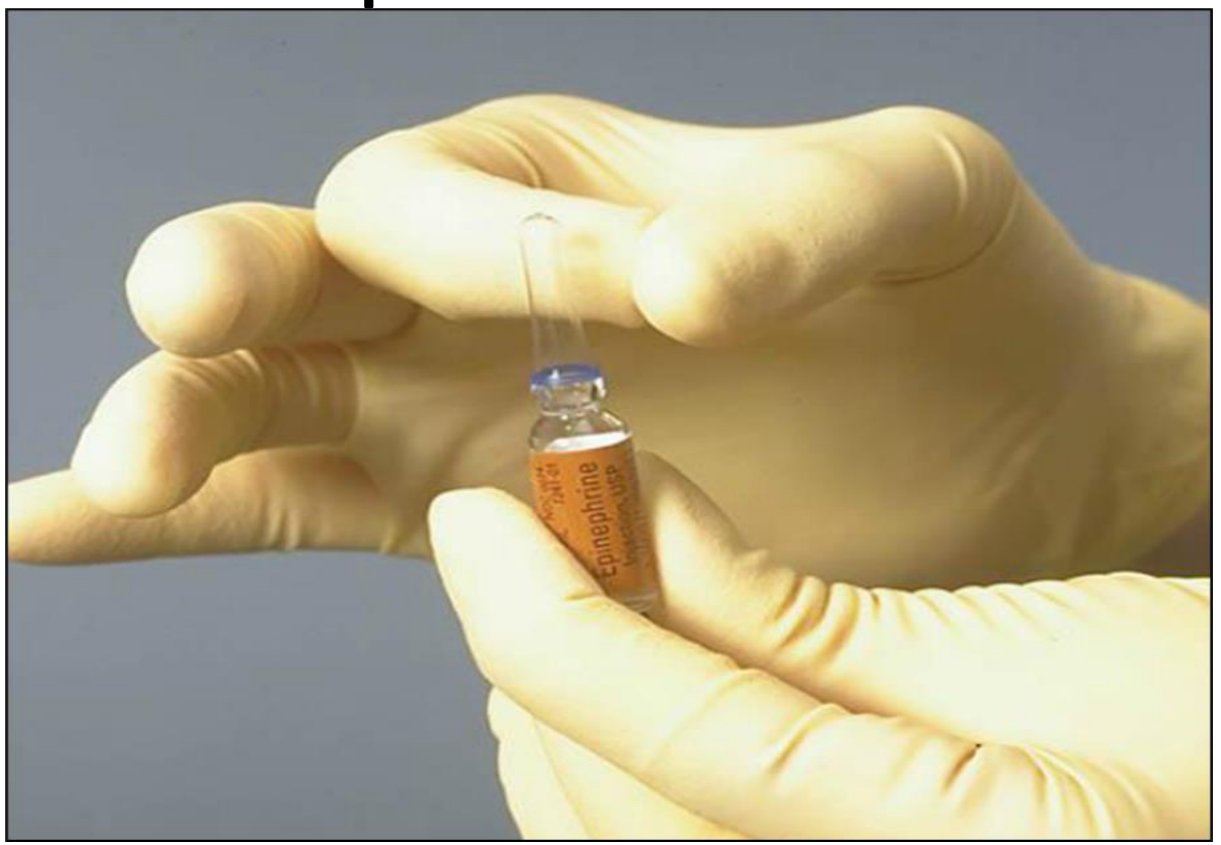
- Choose the correct auto-injector for the weight of the person
- Remove all safety caps prior to placement of the device on the person
- Place the device against the outside of the thigh

Epinephrine Administration



Epinephrine Administration

Clear the ampule neck of medicine



Epinephrine Administration

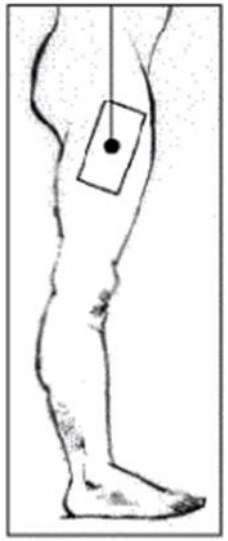
Break neck using alcohol wipe

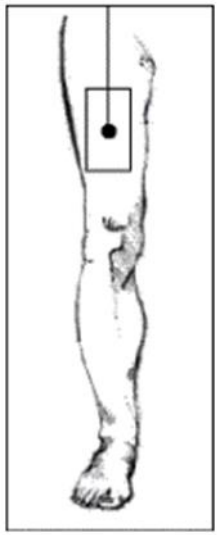
Epinephrine Administration

Hold ampule upside down and draw up dose

Epinephrine Administration

- Insert needle at 90˚
- Pull back to check for blood
- Inject Epinephrine





Epinephrine Administration

Rights of Medication Administration:

- **Right Patient**
- **Right Medication**
- **Right Dose**
- **Right Time**
- **Right Route**
- **Right Duration**
- **Right Storage**
- **Right Risk Management**
- **Right Disposal**
- **Right Documentation**

Glucagon Administration

Hypoglycemia (Low Blood Sugar):

- Most serious “emergency” problem that can occur with blood sugar control
- Comes on very quickly
- Requires early detection and immediate attention

Glucagon Administration

Common causes of hypoglycemia:

- Too much diabetes medication
- Change in meal or snack times
- Not enough food
- Skipping or not finishing meals or snacks
- Getting more physical activity or exercise than usual
- Drinking alcohol without eating

Glucagon Administration

Mild Symptoms	Moderate Symptoms	Severe Symptoms
• Hunger • Sweating • Feeling shaky • Feeling nervous	• Headache • Behavior changes • Blurred, impaired or double vision • Crabbiness or confusion • Drowsiness • Weakness • Difficulty talking	• Unresponsive (including being unable or unwilling to take oral feeding) • Loss of consciousness • Seizure activity

Glucagon Administration

Glucagon:

- A hormone, like insulin, made in the pancreas
- Acts on the liver by converting glycogen to glucose
- Safe and relatively free from adverse reactions
- No human overdose has been reported
- May cause nausea and vomiting

Glucagon Administration

- Do not mix until needed
- Discard any unused portion
- Glucagon solution should be clear and of a water-like consistency
- Check expiration dates periodically
- Injection in fatty tissue or muscle of arm/thigh

Glucagon Administration

- Remove the flip-off seal from reconstitution fluid
- Insert the needle into the vial of reconstitution fluid
- Draw up the reconstitution fluid
- Remove the flip-off seal from glucagon
- Insert the needle into the vial of glucagon
- Push the plunger to inject the entire contents of the liquid into the vial of powdered glucagon
- Gently shake bottle until powder dissolves
- Withdraw the right amount of medication

Glucagon Administration

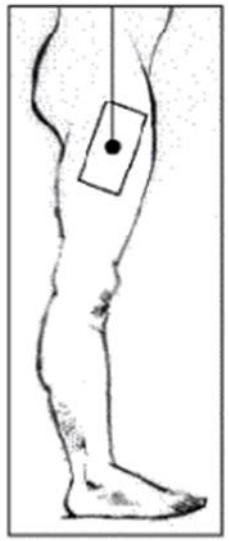
- Insert the needle into the loose skin/muscle of the upper arm or thigh
- Administer all the medication
- Carefully withdraw the needle at the same angle without releasing the person's limb
- Discard needle according to into a sharps container

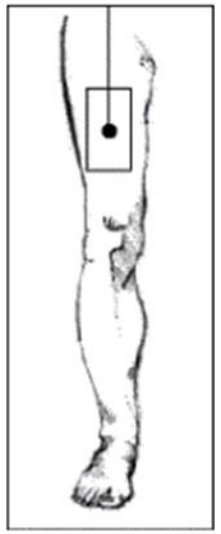
Glucagon Administration

Glucagon Administration

Glucagon Administration

Glucagon Administration





Glucagon Administration

- Position person on side
- Monitor for absent pulse/breath, or seizures
- Improvement will usually be seen within 10-15 minutes
- When responds and able to swallow, feed a fast-acting source of sugar (oral glucose)
- Feed longer-acting source of sugar if possible (carbohydrate and protein)