## TREATMENT:

- A. Treat per Universal Patient Care.
- B. If hyperkalemia is suspected based on history and physical/ECG findings:
  - Administer 10% Calcium Chloride 10 ml slow IV/IO over 5 10 minutes in a proximal port, or Calcium Gluconate 1 gram/10 ml slow IV/IO over 5 – 10 minutes. May repeat after every 5 minutes until desired effect.
  - 2. If no change in rhythm following calcium administration and transport time is prolonged consider alternate therapy:
    - a) Sodium bicarbonate 50 mEq IV/IO
    - b) High dose Albuterol 10 mg by nebulizer
- C. Obtain 12-lead ECG.

## **NOTES & PRECAUTIONS:**

- A. Treatment is going to be based on patient history. Renal failure may elevate blood potassium levels (hyperkalemia) causing bradycardia, hypotension, weakness, weak pulse and shallow respirations. Other patients who are predisposed to hyperkalemia are those who have muscular dystrophy, paraplegia/quadriplegia, crush injury, or patients who have sustained serious burns > 48 hours.
- B. ECG changes that may be present with hyperkalemia include
  - 1. Peaked T waves.
  - 2. Lowered P wave amplitude or no P waves.
  - 3. Prolonged P-R interval (> 0.20 seconds).
  - 4. Second degree AV blocks.
  - 5. Widened QRS complex.
- C. <u>DO NOT</u> mix Sodium Bicarbonate solutions with Calcium preparations. Slowly flush remaining Calcium Chloride from the catheter prior to administering Sodium Bicarbonate.

## **KEY CONSIDERATIONS:**

Previous medical history, medications and allergies, trauma

## **PEDIATRIC PATIENTS:**

**Calcium chloride** dosing is 0.2 ml/kg slow IV/IO over 5 – 10 minutes. Max dose 10 ml. **Calcium gluconate** dosing is 0.5 ml/kg slow IV/IO over 5 – 10 minutes. Use a proximal port. Max dose 10 ml.