

# M100 HYPERKALEMIA

EMT	AEMT	EMT-I	Paramedic
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Do not use this protocol for prolonged entrapment; refer to general trauma care for specific treatment.



Consider hyperkalemia in the following protocols if the patient has risk factors for hyperkalemia, especially with dialysis patients:

- Universal altered mental status
- Bradycardia
- Ventricular arrhythmia
- Adrenal insufficiency



- Assess and stabilize ABC's, give O2 if needed, assess vital signs
- Cardiac monitor, consider 12 Lead
- Start IV
- If there is high clinical suspicion or documented hyperkalemia and the patient has EKG changes indicative of hyperkalemia:
  - Administer calcium
- Consider fluids
  - Administer fluids cautiously if severe acute kidney injury; only administer fluids if patient is producing urine and does not have contraindications such as end-stage renal failure or CHF



- Acquire 12 lead EKG post-treatment if time permits
- Continue monitoring during transport and **Contact Base** if patient

**Hyperkalemia Risk Factors:**

- Dialysis patient
- Chronic renal failure/insufficiency
- Renal injury
- Rhabdomyolysis
- Burns
- Prolonged entrapment/crush injury/suspension syndrome
- Potassium supplements
- Potassium sparing diuretics
- Digoxin toxicity
- Adrenal insufficiency

**EKG Changes Indicative of Hyperkalemia:**

- Peaked T waves
- New wide complex rhythm
- Ventricular tachycardia with the following:
  - P waves disappear
  - Peaked T waves
  - Rate slower than typical VT
  - Very wide QRS
- Sine-wave pattern
- Bradycardia with widened PR interval
- Junctional rhythm



**General Information:**

- Hyperkalemia can be present without EKG changes which may not require EMS treatment of the stable pt.
- EKG changes may not directly correspond to serum potassium levels.
- Calcium is the only medication that will stabilize the cardiac membrane and is the backbone of treatment in the prehospital setting.
- Calcium must be given in a separate IV line from Sodium Bicarbonate to prevent precipitation/formation of calcium carbonate.
- In settings of digoxin toxicity, calcium administration may worsen cardiovascular function and is contraindicated.