

Hyperglycemia – Adult & Pediatric 2.7

Hyperglycemia is defined as blood glucose greater than or equal to 250 mg/dL with associated signs and symptoms.

Early signs include: Increased thirst, headaches, trouble concentrating, frequent urination and fatigue.

EMT STANDING ORDERS – ADULT & PEDIATRIC

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- Routine Patient Care.
- Obtain glucose reading.
- For nausea/vomiting see [Nausea/Vomiting Protocol 2.11](#).

ADVANCED EMT/PARAMEDIC STANDING ORDERS – ADULT & PEDIATRIC

A/P

- ADULT: Administer 500ml bolus of 0.9% NaCl, then 250ml/hr.
- PEDIATRIC: Administer 10 mL/kg bolus of 0.9% NaCl.
 - May repeat fluid bolus two times for a total of 3 fluid boluses, not to exceed adult volume.

EMT/ADVANCED EMT/PARAMEDIC EXTENDED CARE ORDERS

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- Oral fluids: if the patient is not vomiting, provide oral hydration with water.
 - Patient must be alert enough to swallow and protect airway.

PEARLS:

- Diabetic Ketoacidosis (DKA) is a life threatening emergency defined as uncontrolled hyperglycemia with the signs and symptoms of ketoacidosis.
- Signs and symptoms of DKA include uncontrolled blood glucose greater than or equal to 250 mg/dL, weakness, altered mental status, abdominal pain, nausea, vomiting, polyuria (excessive urination), polydipsia (excessive thirst), a fruity odor on the breath (from ketones), and tachypnea (Kussmaul respirations).
- Common causes of DKA include infection, acute coronary syndrome, and medication non-compliance.
- Hyperglycemic Hyperosmolar Nonketotic Syndrome (HHNS) is characterized by blood glucose levels greater than 600 mg/dL and profound dehydration without significant ketoacidosis. Most patients present with severe dehydration and focal or global neurologic deficits e.g. coma, altered mental status.
- Hyperglycemia may be detrimental to patients at risk for cerebral ischemia such as victims of stroke, cardiac arrest, and head trauma.