

GLUCOSE EMERGENCIES

HYPOGLYCEMIA / HYPERGLYCEMIA

ALL PROVIDERS

- ❑ Focused history and physical exam
 - Blood glucose assessment (heel stick is preferred in newborns or infants).
 - Hypoglycemia is defined as blood glucose level <50 mg/dl for adults, <60 mg/dl for children, and <40 mg/dl for the term neonate (<30 days of age) with any degree of altered mentation.
- ❑ **Treatment Plan**
 - Insulin pump in place: Hypoglycemic patient with altered mentation -
 - Care is directed at treating hypoglycemia first, then stopping administration of insulin.
 - Turn off insulin pump, if able.
 - If no one familiar with the device is available to assist, disconnect pump from patient by either:
 - Using quick-release where the tubing enters the dressing on patient's skin.
 - OR-
 - Completely remove the dressing, thereby removing the subcutaneous needle and catheter from under patient's skin.
 - When mental status returns to normal, patient should be strongly encouraged to eat.
 - Criteria for scene release of hypoglycemic patient:
 - Patient does not want to be transported.
 - Return to apparent normal mental capacity following treatment.
 - Insulin only. The patient does not have access to oral medications for diabetes.
 - No suicidal ideations or recent suicide attempt.
 - There is at least one responsible party that can assist them in their recovery and is comfortable in their care.
 - OLMC has been contacted and agrees to the release.
 - Children should be transported for evaluation regardless of improvement in the field.
- ❑ **Key Considerations**
 - Do NOT attempt to give oral glucose to those who are unconscious, cannot swallow or whose gag reflex is diminished.
 - Transport any patient who is at risk for prolonged hypoglycemia such as long acting insulin or oral hypoglycemic overdose.
 - If the patient is hypoglycemic and has a seizure, recheck blood glucose every 15 minutes to check for recurrent low blood sugar that may need treatment.

ADULT

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

EMT

- ❑ **Dextrose Oral glucose 15 grams** if patient is able to protect airway
 - Repeat in 15 minutes as needed

EMT

- ❑ **Dextrose Oral glucose 7.5 grams** if patient is able to protect airway
 - Repeat in 15 minutes as needed

AEMT

- ❑ Vascular access and fluid therapy per **IV/IO Access and Fluid Therapy Guideline**
- HYPOGLYCEMIA**
- ❑ **Dextrose 50% 25 grams** IV/IO. May repeat as necessary
- ❑ **OR Dextrose 10%:** Infuse **125 ml**, then recheck blood sugar. If still low, may repeat
- ❑ **Glucagon 1 mg** IM if no IV/IO access

HYPERGLYCEMIA

- ❑ **Normal Saline 1000 mL** IV/IO over 30–60 minutes (BS >300 mg/dL)

AEMT

- Vascular access and fluid therapy per **IV/IO Access and Fluid Therapy Guideline**
- HYPOGLYCEMIA**
- ❑ Infants up to 1 year
 - **Dextrose 10% 5 mL/kg** IV/IO: may repeat as necessary
- ❑ Children greater than 1 year
 - **Dextrose 25% 2 mL/kg** IV/IO: repeat as necessary (D25 = 25 mL D50 mixed with 25 mL Sterile Water)
 - **OR Dextrose 10% 5 mL/kg** IV/IO: repeat as necessary
- ❑ **Glucagon 0.1 mg/kg** (max dose of 1

mg) IM if no IV/IO access

HYPERGLYCEMIA

- ☐ **Normal Saline 20 mL/kg IV/IO** over 30–60 minutes for hyperglycemic patient (BS >300 mg/dL)

PARAMEDIC

PARAMEDIC