

Patient Care Guidelines EMSaiStack Version 1.0 2026

National EMS Model Compliant

3G HYPOGLYCEMIA

PATIENT CARE GOALS

- Restore normal blood sugar levels, restore normal mental status and function, and ensure adequate oxygenation, ventilation and perfusion.
- Provide patient education and ensure patient safety if not transported.

EMT

ADULT	PEDIATRIC (up to 40 kg or 14 years of age)
1. Assess the patient and provide initial care, including oxygen, per 1B General Assessment and Care. 2. Obtain an initial blood glucose level. Provide treatment if the patient has signs of hypoglycemia AND the blood glucose level is less than 60 mg/dL.¹ 3. Assess for and turn off insulin pump if one is present.² 4. If the patient is able to protect their own airway administer oral glucose or other oral sugar. 5. Recheck the blood glucose level. If level does not increase and/or mental status does not improve request AEMT- or Paramedic-level care or transport the patient.	1. Assess the patient and provide initial care, including oxygen, per 1B General Assessment and Care. 2. Obtain an initial blood glucose level. Provide treatment if the patient has signs of hypoglycemia AND the blood glucose level is below the threshold for the child's age group.¹ ○ Less than 1 year old: Treat blood glucose levels less than 50 mg/dL ○ 1 to 14 years old (up to 40 kg): Treat blood glucose levels less than 60 mg/dL 3. Assess for and turn off insulin pump if one is present.² 4. If the child's age is 1 year or older and able to protect their own airway, administer oral glucose or other oral sugar. 5. Recheck the blood glucose level. If level does not increase and/or mental status does not improve request AEMT- or Paramedic-level care and/or transport the patient.

AEMT

6. Establish vascular access (IV, IO) as needed per 1B General Assessment and Care.

ADULT	PEDIATRIC (up to 40 kg or 14 years of age)
7. If vascular access is delayed, administer glucagon hydrochloride³ 1 mg IM. 8. Establish vascular access via intraosseous route if patient is unresponsive, glucagon	7. If vascular access is delayed, administer glucagon hydrochloride³ 0.5 mg IM if less than 20 kg, or 1 mg IM if 20 kg or greater. 8. Establish vascular access via intraosseous

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fails to improve status, and intravenous access is not obtained with one attempt. 9. Administer 10% dextrose (D10W)⁴, 125 ml (12.5 grams of dextrose) slowly via IV/IO infusion. 10. If patient's mental status does not adequately improve, reassess blood glucose and administer a second dose of 10% dextrose (D10W) 125 ml (12.5 grams), if necessary. 11. If level of consciousness and functioning returns to normal and the patient refuses or does not require transport: ○ Provide patient education. ○ Before allowing no transport, ensure that the patient's blood glucose level measures greater than 80 mg/dL, that food will be available and eaten, the patient has no other injury or illness, and a responsible person is available to the patient. ○ Patients that are hypoglycemic with no history of diabetes should be transported for evaluation and determination of cause (may be a sign of serious undiagnosed illness).	route if patient is unresponsive, glucagon fails to improve status, and intravenous access is not obtained with one attempt. 9. Administer 10% dextrose (D10W)⁴, 5 ml/kg (0.5 grams/kg) slowly via IV/IO infusion. 10. If patient's mental status does not adequately improve, reassess blood glucose and consider additional doses of 10% dextrose (D10W), if necessary. 11. If level of consciousness and functioning returns to normal and the patient refuses or does not require transport: ○ Provide patient education. ○ Before allowing no transport, ensure that the patient's blood glucose level measures greater than 80 mg/dL, that food will be available and eaten, the patient has no other injury or illness, and a responsible person is available to the patient. ○ Patients that are hypoglycemic with no history of diabetes should be transported for evaluation and determination of cause (may be a sign of serious undiagnosed illness).

PARAMEDIC

ADULT	PEDIATRIC (up to 40 kg or 14 years of age)
12. If the patient will be transported, continue to administer 10% dextrose (D10W) at a rate of 100 mL/hour via infusion pump.	12. If the patient will be transported continue to administer 10% dextrose (D10W) at a rate of 2 mL/kg/hour via infusion pump.

DOCUMENTATION KEY POINTS

- Initial and subsequent blood glucose levels.
- Initial signs/symptoms indicating hypoglycemia, and subsequent changes.
- Pertinent information if the patient is not transported, including who the patient was left with, medical advice and information provided to the patient, and recommended actions.

NOTES

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- ¹ Suspect hypoglycemia in any patient with altered level of consciousness, signs of a stroke, or unexplained seizures. Also, suspect blood sugar problems in any sick neonate and in children of any age with unexplained weakness or signs/symptoms of dehydration or infection.
- ² Insulin pumps may be secured in the patient's waistband, pocket, undergarments or sock. Patients who are sleeping may have placed the pump next to their bed, clipped it to their sheets, blanket, pillow, pajamas or stuffed toy, or have it secured on an armband or leg band. Ask the patient or their family for assistance in operating the pump, if possible. If the patient or their family is unable to assist, stop the infusion by withdrawing the device's insertion point at the skin. Use caution when using this method as it will result in an open needle once withdrawn. The type of insulin in a pump is short acting. Once the pump is turned off, a patient should go no longer than two hours without administration of insulin. Notify receiving facility that the patient was using an insulin pump.
- ³ **Glucagon hydrochloride** may take up to 20 minutes to be effective and may not work in patients with depleted glucose stores.
- ⁴ **Dextrose** for IV/IO administration of any concentration is not to be administered orally.