

HCA Healthcare East Florida Division Pharmacy Hypoglycemia Protocol Update

- HCA Healthcare East Florida Division Florida will implement division wide standardized Neonatal and Pediatric Hypoglycemia protocols
- **Go-live Schedule:**
 - **8/31/2026** – HCA Florida St. Lucie, HCA Florida Palms West, HCA Florida Lawnwood Hospitals
 - **10/15/2026** – HCA Florida Kendall, HCA Florida Mercy, HCA Florida University, HCA Florida Northwest Hospitals
- **Scope:** All inpatient departments caring for Pediatric and Neonatal patients
 - Pediatric, Pediatric Medical and NICU Nurses Pharmacy Teams, and License Independent Practitioners (LIP)

EFD Pediatric Hypoglycemia Protocol – If the blood sugar is less than 70mg/dL, NOTIFY the MD and treat using the following guidelines	
If patient is conscious able to swallow:	• Give 15g Dextrose (4oz non-diet juice or Glucose Gel if available)
If patient is UNABLE to swallow or NPO WITH IV access	• Give PRN Dextrose as ordered D10W D10W - 5 ML/KG IV PRN ○ Dextrose 10%, 5mL/kg (max 250mL), IV, PRN Hypoglycemia per instruction ○ Recheck BG in 15 minutes, and if BG remains less than 70mg/dL give additional dose
If blood glucose is less than 70mg/dL, unconscious, unable to swallow, NPO, and no IV access/Unable to give Dextrose	• Give GLUCAGON SUBQ or IM PRN ○ Glucagon 0.5mg for patients < 25kg IM, PRN Hypoglycemia per instructions ○ Glucagon 1 mg for patients > 25kg IM, PRN Hypoglycemia per instructions ○ Recheck BG in 15 minutes, and if BG remains less than 70mg/dL give additional dose ○ Recheck BG in 15 minutes, and if BG remains less than 70mg/dL give additional dose

See back for
Neonatal
Hypoglycemia
guidance

Neonatal Patient Population – Hypoglycemia Management Guidelines

At Risk Asymptomatic Infant: Birth to 4 hours of age	At Risk Asymptomatic Infant: 4 to 24 hours old	Symptomatic Infant: At any age in hours
- Promote early skin to skin - Initiate breastfeeding/colostrum feeds per parents' choice within 30-60 minutes of age	- Continue skin to skin contact with mother - Continue breast milk feeding/colostrum feeds every 2-3 hours or feed per parental choice - Perform POC blood glucose test every 3 hours prior to a feeding.	- Notify provider and Consult Neonatologist to initiate IV D10W infusion with consideration to be made for transfer to higher level of care. - Administer IV D10W 2 ml/kg over 1-2 minutes and start D10W infusion according to provider's order - D10 2ml/kg Bolus (0.2 gram/kg/dose) Q30min PRN BG < 40 Symptomatic - D10W at 3 ml/kg/hr. (0.3 gram/kg/hr.) or 5mg/kg/min
If initial blood glucose screening is less than 40mg/dL - Send stat lab glucose - Notify provider - Glucose Gel: Dextrose 40% gel (200mg/kg) doses of 0.5ml/kg Q30min PRN BG<40 (Max 2 doses). massaged into buccal mucosa - Repeat POC glucose testing 30 minutes after administration of the glucose gel.	If the pre-prandial blood glucose screening result is greater than or equal to 45 mg/dL, continue feeding every 2-3 hours and screen the blood glucose level before each feeding. Discontinue screening after 3 consecutive results are greater or equal to 45mg/dL. before feedings and the appropriate recommended screening duration has passed	If No IV site, Administer Glucagon 0.2 mg/kg/dose IM As Directed for BG < 40 Symptomatic & no IV Site
If the second blood glucose screen is less than 25 mg/dL - Notify provider and Neonatologist to initiate IV D10W infusion with the consideration of to be made to transfer to a higher level of care - D10W 2ml/kg Bolus Q30min PRN - D10W at 3 ml/kg/hr. (0.3 gram/kg/hr.)	If the pre-prandial blood glucose screening result is less than or equal to 44 mg/dL - Notify provider, - Obtain stat lab glucose, - Administer glucose gel as ordered by provider, Glucose Gel: Dextrose 40% gel (0.2g/kg) doses of 0.5ml/kg Q30min PRN BG<45 (Max 2 doses). Massaged into buccal mucosa - Feed infant - Retest the blood glucose level in 1 hour	Repeat blood glucose 30 minutes after IV glucose initiated

If the second blood glucose screen is between 25 mg/dL and 40 mg 1. Notify provider 2. Glucose Gel: Dextrose 40% gel (200mg/kg) doses of 0.5ml/kg Q30min PRN BG<40(Max 2 doses). massaged into buccal mucosa a. Repeat POC glucose testing 30 minutes after administration of the glucose gel.	
3. Feed infant. 4. Repeat POC glucose in 30 minutes. 5. If repeat glucose is less than 40, Notify provider and Consult Neonatologist to initiate IV D10W infusion with consideration to be made for transfer to higher level of care. 6. D10 2ml/kg Bolus (0.2 gram/kg/dose) Q30min PRN Persistent BG 25-40 7. D10W at 3 ml/kg/hr. (0.3 gram/kg/hr.)	
If blood glucose is greater than or equal to 40 mg/dL 1. Feed every 2 to 3 hours 2. Re-check glucose every 3 hours prior to a feeding	

EFD Neonatal Hypoglycemia Protocol

At Risk, Asymptomatic Infant: Birth to 4 hours of age	
Promote early skin-to-skin contact with mother.	
Initiate breastfeeding/colostrum feeds or feeds per parental choice within 30-60 minutes of age.	
POC glucose testing 30 minutes <i>after</i> first feeding.	
If initial blood glucose screening is less than 40mg/dL	1. Send stat lab glucose 2. Notify provider. 3. Glucose Gel: Dextrose 40% gel (0.2g/kg) doses of 0.5ml/kg Q30min PRN BG<40 (Max 2 doses). massaged into buccal mucosa a. Repeat POC glucose testing 30 minutes after administration of the glucose gel.
If the second blood glucose screen is less than 25 mg/dL	1. Notify provider and Consult Neonatologist to initiate IV D10W infusion with consideration to be made for transfer to higher level of care. a. D10 2ml/kg Bolus Q30min PRN b. D10W at 3 ml/kg/hr (0.3 gram/kg/hr)
If the second blood glucose screen is between 25 mg/dL and 40 mg/dL	1. Notify provider 2. Glucose Gel: Dextrose 40% gel (0.2g/kg) doses of 0.5ml/kg Q30min PRN BG<40(Max 2 doses). massaged into buccal mucosa a. Repeat POC glucose testing 30 minutes after administration of the glucose gel. 3. Feed infant. 4. Repeat POC glucose in 30 minutes. 5. If repeat glucose is less than 40, Notify provider and Consult Neonatologist to initiate IV D10W infusion with consideration to be made for transfer to higher level of care. 6. D10 2ml/kg Bolus (0.2 gram/kg/dose) Q30min PRN Persistent BG 25-40 7. D10W at 3 ml/kg/hr (0.3 gram/kg/hr)
If blood glucose is greater than or equal to 40 mg/dL	1. Feed every 2 to 3 hours 2. Re-check glucose every 3 hours prior to a feeding

At Risk, Asymptomatic Infant: 4 to 24 hours old	
Continue skin to skin contact with mother	
Continue breast milk feeding/colostrum feeds every 2-3 hours or feed per parental choice.	
Perform POC blood glucose test every 3 hours prior to a feeding.	
If the pre-prandial blood glucose screening result is greater than or equal to 45 mg/dL, continue feeding every 2-3 hours and screen the blood glucose level before each feeding.	1. Discontinue screening after 3 consecutive results are greater or equal to 45mg/dL before feedings and the appropriate recommended screening duration has passed.
If the pre-prandial blood glucose screening result is less than or equal to 44 mg/dL	1. Notify provider, 2. Obtain stat lab glucose, 3. Administer glucose gel as ordered by provider, a. Glucose Gel: Dextrose 40% gel (0.2g/kg) doses of 0.5ml/kg Q30min PRN BG<45 (Max 2 doses). massaged into buccal mucosa b. Feed infant c. Retest the blood glucose level in 1 hour

Symptomatic Infant: At any age in hours
Notify provider and Consult Neonatologist to initiate IV D10W infusion with consideration to be made for transfer to higher level of care.
Administer IV D10W 2 mL/kg over 1-2 minutes and start D10W infusion according to provider's order 1. D10 2mL/kg Bolus (0.2 gram/kg/dose) Q30min PRN BG < 40 Symptomatic 2. D10W at 3 mL/kg/hr (0.3 gram/kg/hr) or 5mg/kg/min
If No IV site, Administer Glucagon 1. Glucagon 0.2 mg/kg/dose IM As Directed for BG < 40 Symptomatic & no IV Site
Repeat blood glucose 30 minutes after IV glucose initiated

References

Adamkin, D. & Committee on Fetus and Newborn. Clinical Report- Postnatal Glucose Homeostasis in Late-Preterm and Term Infants. *Pediatrics* vol. 127:3, 575-579. 3/2011 from www.pediatrics.org/cgi/doi/10.1542/peds.2010-3851

Bennet, C., Fagan, E., Chaharbakhshi, E., Zamfirova, I., Flicker, J. (2016). Implementing a Protocol using Glucose Gel to Treat Neonatal Hypoglycemia. *Nursing for Women's Health*.

Karlsen, K. Post-resuscitation/Pre-transport Stabilization Care of Sick Infant, Guidelines for Healthcare providers. 6th ed. 2013

Maine Health (2024). Healthcare Professionals Clinical Guidelines & Protocols. Pediatric Clinical Guidelines. Newborn Guidelines. Newborn Hypoglycemia. <https://www.mainehealth.org/health-care-professionals/clinical-guidelines-protocols/pediatric-guidelines-protocols>

<https://med.stanford.edu/newborns/clinical-guidelines/hypoglycemia.html>

Epocrates online accessed 11/2018.

Wight, N., & Marinelli, K. A. (2014). ABM Clinical Protocol #1: Guidelines for blood glucose monitoring and treatment of hypoglycemia in term and late-preterm neonates, revised 2014. *Breastfeeding Medicine*, 9(4), 173-179. doi:10.1089/bfm.2014.9986 [ehsl://cinahl/107793739 ehsl://pubmed/2482391](https://pubmed.ncbi.nlm.nih.gov/2482391/)

The Children's Hospital of Philadelphia. Hypoglycemia and the Newborn. 11/16/2018

Copyright © 2018 EBSCO Industries, INC. Retrieved 11/2018, from EBSCO Nursing Skills: <https://www.dynahealth.com/skills/t91455-glucose-testing-in-newborns>