

Section: Division of Nursing
 Approval: _____

 * **PROTOCOL** *

HACKETTSTOWN COMMUNITY HOSPITAL

Originator:
 Revised by: Department of Pediatrics

NEWBORN SERVICES
 (Scope)

TITLE: HYPOGLYCEMIA PROTOCOL FOR THE NEONATE

PURPOSE: To outline steps for monitoring for hypoglycemia (blood sugar less than 40 mg/dl) in patients at high risk of the development of hypoglycemia.
 LEVEL: Interdependent Dependent Independent

SUPPORTIVE DATA: Prevention of hypoglycemia requires awareness of conditions that predispose an infant to its development. Early screening of blood glucose levels in the high-risk infants will identify hypoglycemia promptly. Treatment is based on the severity of the hypoglycemia and the presence or absence of symptoms. Accu Data GTS procedure is performed on a physician's order or at the discretion of the RN (as specified below.) This procedure is performed by the RN or LPN who is certified in this procedure.
All newborns will have an Accu Data GTS procedure performed at the frequencies specified, if they fall into any of the following categories.

Risk Factors (Not all inclusive)	Signs of Hypoglycemia (Not all inclusive)
<ul style="list-style-type: none"> Small for gestational age (SGA), i.e birthweight less than the tenth percentile for gestational age. 	<ul style="list-style-type: none"> Diaphoresis
<ul style="list-style-type: none"> Large for gestational age (LGA), birthweight greater than 4000 grams (8 lbs 13 ½ oz.) in an infant greater than or equal to 37 weeks gestation. 	<ul style="list-style-type: none"> Jitteriness or tremors
<ul style="list-style-type: none"> Infants less than 2500 grams (5 lbs 8 ½ oz.). 	<ul style="list-style-type: none"> Hypothermia (rectal temperature less than 98.6 degrees for two or more hours)
<ul style="list-style-type: none"> Infant of diabetic mother. 	<ul style="list-style-type: none"> Lethargy/Hypotonia
<ul style="list-style-type: none"> Pre-term infant less than 37 weeks gestation or post-term 41 weeks or greater. 	<ul style="list-style-type: none"> Periodic breathing/apnea
<ul style="list-style-type: none"> Administration of beta blockers to the mother. 	<ul style="list-style-type: none"> Tachypnea greater than 80
	<ul style="list-style-type: none"> Respiratory distress (grunting, flaring, retractions, cyanosis)
	<ul style="list-style-type: none"> Tachycardia greater than 180
	<ul style="list-style-type: none"> Seizures
	<ul style="list-style-type: none"> Poor feeding

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Content:	Steps	Key Points
	1. Perform accucheck glucose screening within 1 hour after delivery on all at risk infants	If initial screening glucose is greater than 40mg/dl, continue glucose screening until 3 consecutive before feeding values are greater than 40mg/dl, then discontinue. (minimum 9 hours).
	2. Perform accucheck glucose screen immediately if infant manifests signs compatible with hypoglycemia.	Any infant showing signs and symptoms of hypoglycemia should be tested PRN per assessment of the nurse. Notify Pediatrician.
	3. Draw lab heelstick glucose if screening glucose is less than 40mg/dl. Notify Pediatrician.	Infants with lab glucose level less than 25mg/dl, regardless of the presence or absence of symptoms, should be reported immediately to the Pediatrician.
	4. Initiate feedings (breast or bottle) per feeding protocol.	Repeat accuchecks before feedings (q 2 - 3 hours).
	5. When accucheck glucose is greater than 40mg/dl before feeding, then discontinue.	There must be 3 consecutive before feeding glucose values greater than 40mg/dl.
		Infants less than 2500 grams and those determined to be SGA should have glucose screening for at least 24 hours even if the early values are greater than 40mg/dl.

RECOMMENDED PROTOCOL FOR FEEDINGS IN TREATMENT OF HYPOGLYCEMIA

BREAST BABIES: If blood sugar is less than 40 mg/dL by Accu Data GTS, the baby should be encouraged to vigorously breastfeed for 20 - 30 minutes. If feeding is unsuccessful, the baby should be fed 10% glucose water. Notify the physician of the low blood sugar. May order glucose test through lab to check results.

FORMULA BABIES: If blood sugar is less than 40 mg/dL by Accu Data GTS, the baby is to be formula fed. Notify the physician of the low blood sugar. May order glucose test through lab to check results.

REFERENCE:

Cornblath, Marvin, MD, et.al. "Controversies Regarding Definition of Neonatal Hypoglycemia: suggested Operational Thresholds". *Pediatrics*, 105 (5), May 2000: pp1141-1145.

Cornblath, Marvin, MD and Ichord, Rebecca. "Hypoglycemia in the Neonate", *Seminars in Perinatology*, Vol. 24 (2), April 2000: pp 136 – 149.