

# Management of At Risk Newborns for Hypoglycemia (First 24 hrs of life)

“At-risk” defined as: Late Preterm (35-36 6/7 weeks), LGA (>4000 gms), SGA (<2500 gms), IDM and/or GDM, Apgar <6 at 1 minute, Maternal Beta Blocker



**Symptomatic and blood sugar <40mg/dl → Notify Provider** (if symptomatic do not follow protocol)

**Symptoms of Hypoglycemia:** Irritability, tremors, jitteriness, high-pitched cry, lethargy, cyanosis, apnea, poor feeding, tachypnea, seizure.



## AYSMPOMATIC

**Provide uninterrupted skin to skin care and initiate first feed WITHIN 1 hour of life**

(May receive up to 2 doses of glucose gel then LIP notified)

Birth to 4 hours of age			4 to 24 hours of age		
<b>Target glucose ≥ 40 mg/dl</b> Screen glucose between 90-120 minutes of life – after 1 <sup>st</sup> feeding (Initiate effective feeding within 1 hr of life)			<b>Target glucose ≥ 45 mg/dl</b> Feed newborn every 2-3 hours Check blood glucose before each feed		
<b>Blood glucose less than or equal to 20 mg/dl</b> *Notify LIP and direct transfer to NICU  While awaiting transfer to the NICU initiate the following: <ul style="list-style-type: none"> <li>Glucose gel immediately</li> <li>Place skin-to-skin and feed</li> <li>Send serum glucose for glucometer confirmation (use order - <b>Glucose Meter Check</b>)</li> </ul>	<b>Blood glucose 21-39 mg/dl</b> <ul style="list-style-type: none"> <li>Give glucose gel immediately per dosage chart</li> <li>Place skin-to-skin</li> <li>Continue to feed q 2-3 hrs</li> <li>Consider supplement after breastfeeding</li> <li>Repeat BG 1 hr after gel dose</li> </ul>	<b>Blood glucose greater than or equal to 40 mg/dl</b> <ul style="list-style-type: none"> <li>Continue feeds q 2-3- hrs</li> <li>Consider supplement after breastfeeding</li> <li>Screen glucose level prior to each feed</li> </ul>	<b>Blood glucose Less than or equal to 25 mg/dl</b> * Notify LIP and direct transfer to NICU  While awaiting transfer to the NICU initiate the following: <ul style="list-style-type: none"> <li>Glucose gel immediately</li> <li>Place skin-to-skin and feed</li> <li>If less than 20 mg/dl and not previously sent send serum glucose</li> </ul>	<b>Blood glucose 26-44 mg/dl</b> <ul style="list-style-type: none"> <li>Give glucose gel</li> <li>Place skin to skin</li> <li>Continue feed q 2-3 hours</li> <li>Consider supplement after breastfeeding</li> <li>Screen glucose 1 hr after dose of gel</li> </ul>	<b>Blood glucose greater than or equal to 45 mg/dl</b> <ul style="list-style-type: none"> <li>Continue feeds q 2-3 hrs</li> <li>Consider supplement after breastfeeding</li> <li>Screen glucose level prior to each feed</li> <li>Ensure that the glucose is at least 2 hrs from last glucose</li> <li>Once glucose is greater than or equal to 45 mg/dl x2, can recheck glucose every other feed until 24 hrs of age</li> </ul>
Follow up glucoses (birth to 4 hrs of age) follow above guidelines			Follow up glucoses (4 to 24 hrs of age) follow above guidelines		

### Definition of Feeding

\*If infant does not meet definition of feeding AND is not maintaining appropriate blood glucose levels, consider infant symptomatic and follow Symptomatic Protocol.

<b>Breastfeeding Infant:</b>	Facilitate nursing at the breast with rhythmic suck and audible swallows. If infant is not breastfeeding within 15 minutes, initiate hand expression and feed infant 1-3 mL of expressed colostrum. <b>If no colostrum feed infant banked breastmilk if mother desires. Otherwise, feed 15 mL of 20 calorie formula of choice.</b>
<b>Formula Fed Infant:</b>	Feed 15 mL of 20 calorie-formula of choice.

\*at McDowell – Call LIP and discuss treatment at McDowell or transfer to NICU.

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Guidelines for 40% Glucose Gel Dosing (400mg/mL) per buccal (inner cheek) mucosa with 30 second massage		
Birth weight (kg)	Dose (mg)	Amount (mL)
2.0 – 2.25	400	1
2.251 – 2.75	500	1.25
2.751 – 3.25	600	1.5
3.251 – 3.75	700	1.75
3.751 – 4.25	800	2
4.251 – 4.75	900	2.25
4.751 – 5.25	1000	2.5

## Gel Administration



Squeeze weight based dose into syringe



Dry the buccal cavities with a sterile 2 x 2



Place partial dose on latex free gloved finger



Massage into buccal mucosa alternating sides until dose is complete.