

Hypoglycemia Guideline for Newborns (Green and Yellow Pathways)

All infants should be fed within the first hour of life and prior to first BG check

RISK CATEGORY 1

Measure 1st BG within 1 hour of life (after 1st feed/attempted feed) and at approximately 4 and 7 hours of life.

- a) Infant of Diabetic Mother
- b) LGA, see chart below
- c) Post-dates >41^{6/7} weeks
- d) 5 min Apgar <7
- e) Any beta blocker or terbutaline administered within 48 hours of baby's birth
- f) **Respiratory distress > 1 hr ****

RISK CATEGORY 2

Measure 1st BG within 1 hour of life (after 1st feed/attempted feed) and at approximately 4, 7, 13, and 19 hours of life. Last measure should be pre-feed.

- g) SGA, see chart below
- h) Preterm (<37^{0/7} weeks)
- i) Birth weight <2500gm
- j) **Family history of hypoglycemia ****
- k) **Congenital syndrome or midline abnormalities (e.g. cleft lip/palate, microphallus)****

GREEN PATHWAY

Risk Category 1 (a) – (f)

- Continue breast or formula feeding
- Repeat q3h BGx2 with at least one prefeed check
- Can stop BG check if BG **GREEN** x 3

Risk Category 2 (g) – (k)

- Continue breast or formula feeding
- Repeat q3h BG x2 and then q6hx2 with at least one prefeed check
- Can stop BG check if BG **GREEN** at all checks
- Consider 6 hour safety fast before discharge for risk category j, k

YELLOW PATHWAY

GEL

GIVE GEL ASAP¹

FEED

FIRST GEL, feed per parental preference
SECOND and THIRD GEL, feed formula (15-30ml)³ then breastfeed if desired

NEXT STEPS

- Recheck BG 30 min after gel & feeding complete
- If **RED**, repeat gel¹, notify MD², start feeding and go to **RED** pathway
 - If **YELLOW**, repeat **YELLOW** pathway
 - If BG does not increase by more than 5mg/dL after gel/feed, notify MD²
 - If 3 gels have been given⁴, and BG is **YELLOW** or **RED**, notify MD², start formula feeding and go to **RED**

RED PATHWAY

(or transferred from Yellow Pathway)

Transfer to NICU Triage and See Red Pathway guideline

NOTES:

- ¹ Dosage for dextrose gel (40%): 200 mg/kg or 0.5ml/kg, massage gently onto buccal mucosa. Gel is available in omnicell as override medication
 - ² MD refers to pediatrician who is assigned to infant during the day and DR-1 overnight.
 - ³ 15-30mL is recommended feeding amount, but volume should be infant driven. When infants require formula, ensure that mothers pump to promote lactogenesis.
 - ⁴ Dextrose gel can be provided a maximum of three times total during hospital stay
- ** Risk factors not included in BPA**

Table 1. Blood Glucose Ranges (mg/dL)

AGE (hours)	<20	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60+
0-4	Red	Red	Yellow	Yellow	Yellow	Green	Green	Green	Green
>4 and ≤24	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green	Green
>24 and ≤48	Red	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green
>48	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Green

Table 2. SGA/LGA cutoffs

GA	SGA	LGA
37 - 37 6/7	<2500	>3500
38 - 38 6/7	<2700	>3800
39 - 39 6/7	<2800	>4000
40+	<2900	>4100

