

Hypoglycemia Guideline for Newborns (Red Pathway)

RED PATHWAY (or transferred from yellow pathway)

Transfer to NICU Triage, repeat POC BG and obtain STAT plasma glucose (PG)¹

GREEN

Redder

Place PIV. Give D10W bolus (2ml/kg) and start D10W at 60 ml/kg/day

RED

If 3 gels have not been given, give gel^{2,3} **and** feed formula⁴
If 3 gels have been given³, place PIV and start D10W at 60ml/kg/day

YELLOW

If 3 gels have not been given, give gel^{2,3}, feed formula⁴
If 3 gels have been given³, place PIV and start D10W at 30ml/kg/day

Restart **GREEN** pathway in NICU triage or newborn nursery⁵

Next POC BG/ PG should be done in NICU triage

For infants cycling out of the **RED** pathway for the **SECOND** time, neonatologist and pediatrician will discuss plan.

Repeat POC and PG 30 min after above intervention¹

If on IVF:
1. Adjust GIR to goal BG (green zone) if on IVF
2. Consider weaning GIR by 0.5 if BG 5-10mg/dL above goal and by 1 if BG ≥10mg/dL above goal
3. For infants who require prolonged IVF (>4 days) to maintain normoglycemia, see Notes 6 and 7

	Blood Glucose (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

- NOTES:**
- ¹ If POC is in red or redder zone, act on POC result, If POC in yellow or green zone, wait for plasma result. When infant in NICU, preference is plasma glucose (PG). Order PG stat.
 - ² 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.
 - ³ Dextrose gel can be provided a maximum of three times total during hospital stay
 - ⁴ 15-30mL is recommended feeding amount, but volume should be infant driven. When infants require formula, ensure that mothers pump to promote lactogenesis.
 - ⁵ Treatment location (newborn nursery vs. triage) should be decided by attending pediatrician in consultation with parents, medical and nursing staff.
 - ⁶ Consider endocrine consultation and check newborn screening result around 5 days of life if GIR is high (>8) or increasing, Infant is requiring caloric fortification to maintain normal BG, Infant has a family history of hypoglycemia or is syndromic
 - ⁷ Consider six hour safety fast before discharge if infant is being discharged home on caloric fortification due to hypoglycemia, Infant required IVF after DOL 4 for hypoglycemia, Infant has a family history of hypoglycemia, is syndromic or has midline defects

