REGIONAL PEDIATRIC PARENTERAL DRUG MONOGRAPH

GENERIC NAME

dextrose

Effective Date: Sept10-2014 **Revised Date:**	CLASSIFICATION **Caloric supplement**	OTHER NAMES	PAGE 1 of 2

ADMINISTRATION POLICY:
IV Bolus – May be administered by a nurse
IV Intermittent – May be administered by a nurse
IM Injection – Not recommended

RECONSTITUTION/DILUTION/ADMINISTRATION:
Available as: 50% (500 mg/mL) - 50 mL and pre-filled syringe, D10W (100 mg/mL) 500 and 1000 mL bag

IV Bolus: over 1 minute

Intermittent: over 30 minutes to 2 hours

Continuous infusion: as directed by physician

DOSAGE:

Hypoglycemia:

Newborn**:** IV bolus: 2 to 4 mL/kg of D10W (provides 0.2 to 0.4 grams per kg of dextrose)
Followed by a continuous infusion of 80 to 100 mL per kg per day of D10W
(5 to 7 mg per kg per minute of glucose)

Infants and children: IV bolus: 1 to 2 mL per kg of D50W (0.5 to 1 gram per kg of dextrose)

Hyperkalemia:

Newborn: 4 mL per kg D10W (0.4 grams per kg)

Infants and children: 5 to 10 mL per kg D10W (0.5 to 1 gram per kg)

Maximum dose: 25 grams

Maximum rate : Bolus: 200 mg per kg over 1 minute
Intermittent: 30 minutes

Maximum concentration : Peripheral: 12.5%
Centrally: 25%

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STABILITY/COMPATIBILITY:

Compatibility: N/A

PRECAUTIONS, POTENTIAL ADVERSE REACTIONS:
- most adverse reactions are due to excessive dose or rapid rate of infusion
- CV: venous thrombosis, phlebitis, hypovolemia, hypervolemia, dehydration, edema
- CNS: fever, confusion, unconsciousness
- Endocrine: hyperglycemia, hypokalemia, acidosis, hypophosphatemia, hypomagnesemia
- Other: vein irritation, polyuria, tachypnea

CAUTION
- sudden appearance of glucose intolerance may be a sign of sepsis in infants (monitor carefully)
- use with caution in premature infants as rapid changes in osmolality may produce profound effects on the brain – including intraventricular hemorrhage. Small incremental changes in infusion rates are necessary

ADDITIONAL NOTES AND NURSING CONSIDERATIONS:
- rebound hypoglycemia may occur with sudden decreases in dextrose infusion – taper gradually