

Michigan MEDICATION SECTION DEXTROSE

Initial Date: 07/19/2023

Revised Date: Section: 9-19R

Dextrose

Pharmacological Category: Glucose-Elevating Agent

Routes: IV/IO

Indications:

1. Hypoglycemia

2. Altered mental status

Precautions:

- 1. Ensure patent line, extravasation may cause significant tissue damage.
- 2. Dextrose should be pushed slowly (e.g., over 1-2 minutes).

Expected effects:

- 1. Increased blood glucose level
- 2. Improvement in altered mental status.

Notes:

- 1. Instructions for diluting dextrose
 - a. To obtain dextrose 10%, discard 40 mL out of one amp of D50, then draw up 40 mL of NS into the D50 ampule.
 - b. To obtain dextrose 12.5%, discard 37.5 mL out of one amp of D50, then draw 37.5 mL of NS into the D50 ampule
 - c. To obtain dextrose 25%, discard 25 mL out of one amp of D50, then draw 25 mL of NS into the D50 ampule
- 2. May utilize 10% for all ages 5 mL/kg (0.5 gm/kg) up to 250 mL

Dosing: ADULT ALTERED MENTAL STATUS

Indication: Patient is demonstrating signs of hypoglycemia, blood glucose is < 60 mg/dL. <u>Adults</u> administer:

1. Dextrose 25 gm IV, titrate to fully awake and oriented.

Dosing: ADULT SEIZURES

Indication: Seizure patient with blood glucose < 60 mg/dL

Adults administer:

1. Dextrose 25 gm IV

Dosing: PEDIATRIC ALTERED MENTAL STATUS

Indication: Patient is demonstrating signs of hypoglycemia and blood glucose is <60 mg/dLas follows:

- 1. 2 months old or younger and blood glucose is <40 mg/dL
- 2. 3 months old or older and blood glucose is <60 mg/dL

Pediatrics administer:



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- Dextrose according to MI MEDIC cards
- 2. If MI MEDIC <u>iscards are</u> not available use <u>tablechart</u> below:

Dosing: PEDIATRIC SEIZURES

Indication: Pediatric seizure patient and blood glucose is <60 mg/dLas follows:

- 1. 2 months old or younger and glucose is <40 mg/dL
- 2. 3 months old or older and glucose is <60 mg/dL

Pediatrics administer:

- 1. Dextrose according to MI MEDIC cards
- 2. If MI MEDIC cards are not available utilize the tablechart below.

Dosing: PEDIATRIC CARDIAC ARREST

Indication: Pediatric patients in cardiac arrest with a blood glucose is less than 60 mg/dL Pediatrics administer:

- 1. Dextrose according to MI MEDIC cards
- 2. If MI MEDIC cards are not available utilize the tablechart below.
- 3. If chart is not available administer dextrose 0.5 g/kg

Color	Age	Weight	Dose	Concentration	Volume		Concentration	Volume
Grey	0-2	3-5 kg	2.5g	Dextrose	20 mL	OR	Dextrose 10%	25 mL
	months	(6-11 lbs.)		12.5%				
Pink	3-6	6-7 kg	3.25g	Dextrose 25%	13 mL	OR	Dextrose 10%	33 mL
	months	(13-16 lbs.)						
Red	7-10	8-9 kg	4.25g	Dextrose 25%	17 mL	OR	Dextrose 10%	43 mL
	months	(17-20 lbs.)						
Purple	11-18	10-11 kg	5g	Dextrose 25%	20 mL	OR	Dextrose 10%	50 mL
	months	(21-25 lbs.)						
Yellow	19-35	12-14 kg	6.25g	Dextrose 25%	25 mL	OR	Dextrose 10%	63 mL
	months	(26-31 lbs.)						
White	3-4	15-18 kg	8g	Dextrose 25%	32 mL	OR	Dextrose 10%	80 mL
	years	(32-40 lbs.)						
Blue	5-6 years	19-23 kg	10g	Dextrose 25%	40 mL	OR	Dextrose 10%	100 mL
		(41-50 lbs.)						
Orange	7-9	24-29 kg	12.5g	Dextrose 50%	25 mL	OR	Dextrose 10%	125 mL
	years	(52-64 lbs.)						
Green	10-14	30-36 kg	15g	Dextrose 50%	40 mL	OR	Dextrose 10%	150 mL
	Years	(65-79 lbs.)						

Used in the Following Protocols

Altered Mental Status (Section 3 Adult Treatment)

Seizures (Section 3 Adult Treatment)

Pediatric Altered Mental Status (Section 4 Obstetrics and Pediatrics)

MCA Name MCA Board Approval MCA Implementation Date MDHHS Approval:-7/19/23



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Pediatric Seizures (Section 4 Obstetrics and Pediatrics)

Pediatric Cardiac Arrest – General (Section 6 Pediatric Cardiac)