	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8002.03
	PROGRAM DOCUMENT:	Initial Date:	04/19/21
	Diabetic Emergency (Hypoglycemia/Hyperglycemia)	Last Approved Date:	06/22/23
		Effective Date:	11/01/25
		Next Review Date:	06/01/25

Signature on File	Signature on File
EMS Medical Director	EMS Administrator

Purpose:

A. To serve as a treatment standard for patients exhibiting signs and symptoms of a diabetic emergency.

Authority:

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

Protocol:

Hypoglycemia:

- 1. Decreased responsiveness (Glasgow Coma Score < 14)
- 2. Blood Glucose level ≤ 60mg/dl.
- 3. History of Diabetes

BLS

- 1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use the lowest concentration and flow rate of O2 possible.
- 2. Airway adjuncts as needed.
- 3. Perform blood glucose determination.
- 4. If blood glucose is ≤ 60 mg/dl **AND** the patient is awake, able to cooperate and swallow, administer:
 - oral glucose: orange juice sweetened with sugar, regular soft drinks, candy, oral glucose paste, or 50% dextrose only if the patient is alert and oriented. Have the patient swallow a small amount of water, and if tolerated, the EMT may give glucose.
- 5. Transport.

ALS

- 1. Initiate vascular access.
- 2. If blood glucose > 60 mg/dl, consider other causes of decreased sensorium.
- 3. If blood glucose ≤ 60 mg/dl, treat as follows:
 - Dextrose 10-12.5 grams IV. If blood sugar remains ≤ 60 mg/dl, give additional Dextrose 12.5-25 grams IV. May repeat for a total of 50 grams.

NOTE: Concentrations of 10% Dextrose (D10) or 50% Dextrose (D50) may be used.

- 4. If IV access is unavailable or delay is anticipated, utilize one of the following options:
 - Glucagon: 1 mg Intramuscular (IM).

- Establish IO access and administer Dextrose 40-12.5 grams IV. If blood sugar remains ≤ 60 mg/dl, give additional Dextrose 12.5-25 grams IV. May repeat for a total of 50 grams.
- 6. In the event of glucometer failure, administer 10-12.5 grams of Dextrose or 1 mg of Glucagon based on clinical assessment.

Hyperglycemia:

- 1. Blood Glucose Level ≥ 350mg/dl
- 2. History of Diabetes
- 3. Weakness
- 4. Confusion
- 5. Nausea/Vomiting
- 6. Fruity-smelling breath
- 7. Shortness of Breath
- 8. Coma

BLS

- 1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use the lowest concentration and flow rate of O2 as possible.
- 2. Transport

ALS

1. Perform blood glucose determination; if blood glucose ≥ 350 mg/dl and there is no evidence of fluid overload, initiate vascular access and administer a Normal Saline bolus of 500ml.

Cross Reference: PD# 8003 – Seizures

PD# 8015 - Trauma

PD# 8020 - Respiratory Distress: Airway Management

PD# 8044 – Spinal Motion Restriction PD# 8063 – Nausea and Vomiting PD# 8829 – Noninvasive Ventilations

Consider AEIOUTIPS:

Alcohol Trauma
Epilepsy Infection
Insulin Psychiatric

Overdose Stroke or Cardiovascular

Uremia