	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8002.01
	PROGRAM DOCUMENT: **Diabetic Emergency** **(Hypoglycemia/Hyperglycemia)**	Initial Date:	04/19/21
		Last Approved Date:	
		Effective Date:	07/01/22
		Next Review Date:	06/01/23

Signature on File
EMS Medical Director

Signature on File
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
4. Determine, if possible, when patient was last observed normal.

BLS

1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use the lowest concentration and flow rate of O2 as possible.
2. Airway adjuncts as needed.
3. If trauma suspected, assess for traumatic injury and/or need for Spinal Motion Restriction (SMR) when indicated per PD# 8044.
4. Perform blood glucose determination
   - 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, EMT may give glucose.
5. Transport.

ALS

1. Initiate vascular access and titrate to a Systolic Blood Pressure (SBP) > 90 mmHg.
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 12.5-15 grams IV. May repeat for total of 50 grams.
4. If IV access is unavailable or delay is anticipated, treatment options are:
   - Glucagon: 1 mg Intramuscular (IM).
5. Airway management as needed per PD# 8020.

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

- If IV access is unavailable and the blood sugar ≤ 60 mg/dl or decreased responsiveness continues for more than fifteen (15) minutes after administration of Glucagon, IO access should be established.

6. In the event of glucometer failure, administer 10-12.5 grams of Dextrose or 1 mg of Glucagon based on clinical assessment.
7. Cardiac monitoring.

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. Airway management as needed per PD# 8020. 3. Spinal motion restriction when indicated per PD# 8044. 4. Perform blood glucose determination. 5. If patient is seizing, protect the patient from further injury. 6. Transport
ALS
1. Perform blood glucose determination, if blood glucose ≥ 350 mg/dl and no evidence of fluid overload, initiate vascular access, and administer a Normal Saline bolus of 500ml. 2. Airway adjuncts as needed 3. Noninvasive Ventilations (NIV) as needed per PD# 8829 4. Cardiac Monitoring 5. Ondansetron when indicated for Nausea/Vomiting per PD# 8063

Cross Reference:
PD# 8044 – Spinal Motion Restriction
PD# 8829 – Noninvasive Ventilations
PD# 8063 – Nausea and Vomiting
PD# 8015 – Trauma
PD# 8020 – Respiratory Distress: Airway Management
PD# 8003 – Seizures

Consider AEIOUTIPS:

Alcohol
Epilepsy
Insulin
Overdose
Uremia
Trauma
Infection
Psychiatric
Stroke or Cardiovascular