

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	Document #	8002.02	
	<b>PROGRAM DOCUMENT:</b>  <b>Diabetic Emergency</b> <b>(Hypoglycemia/Hyperglycemia)</b>		Initial Date:	04/19/21
			Last Approved Date:	06/22/23
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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

<b>BLS</b>
<ul style="list-style-type: none"> <li>1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use the lowest concentration and flow rate of O2 possible.</li> <li>2. Airway adjuncts as needed.</li> <li>3. Perform blood glucose determination.</li> <li>4. If blood glucose is ≤ 60 mg/dl <b>AND</b> the patient is awake, able to cooperate and swallow, administer:             <ul style="list-style-type: none"> <li>• 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.</li> </ul> </li> <li>5. Transport.</li> </ul>
<b>ALS</b>
<ul style="list-style-type: none"> <li>1. initiate vascular access.</li> <li>2. If blood glucose &gt; 60 mg/dl, consider other causes of decreased sensorium.</li> <li>3. If blood glucose ≤ 60 mg/dl, treat as follows:             <ul style="list-style-type: none"> <li>• Dextrose 10-12.5 grams IV. If blood sugar remains ≤ 60 mg/dl, give additional Dextrose 12.5-15 grams IV. May repeat for a total of 50 grams.</li> </ul> </li> </ul> <p style="margin-left: 40px;"><b>NOTE:</b> Concentrations of 10% Dextrose (D10) or 50% Dextrose (D50) may be used.</p> <ul style="list-style-type: none"> <li>4. If IV access is unavailable or delay is anticipated, utilize one of the following options:             <ul style="list-style-type: none"> <li>• Glucagon: 1 mg Intramuscular (IM).</li> </ul> </li> </ul>

- Establish IO access and administer Dextrose 10-12.5 grams IV. If blood sugar remains  $\leq 60$  mg/dl, give additional Dextrose 12.5-15 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  $\geq 350$ mg/dl
2. History of Diabetes
3. Weakness
4. Confusion
5. Nausea/Vomiting
6. Fruity-smelling breath
7. Shortness of Breath
8. Coma

BLS
<ol style="list-style-type: none"> <li>1. Supplemental O2 as necessary to maintain SpO2 <math>\geq 94\%</math>. Use the lowest concentration and flow rate of O2 as possible.</li> <li>2. Transport</li> </ol>
ALS
<ol style="list-style-type: none"> <li>1. Perform blood glucose determination; if blood glucose <math>\geq 350</math> mg/dl and there is no evidence of fluid overload, initiate vascular access and administer a Normal Saline bolus of 500ml.</li> </ol>

- 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   |                          |