

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	Document #	8002.01
	<u>PROGRAM DOCUMENT:</u>  <b>Diabetic Emergency</b>	Initial Date:	04/19/21
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Signature on File

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 EMS Medical Director

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 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.

<b>BLS</b>
<ol style="list-style-type: none"> <li>1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use the lowest concentration and flow rate of O2 as possible.</li> <li>2. Airway adjuncts as needed.</li> <li>3. Spinal motion restriction when indicated per PD# 8044.</li> <li>4. Perform blood glucose determination           <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, EMT may give glucose.</li> </ul> </li> <li>5. Transport.</li> </ol>

<b>ALS</b>
<ol style="list-style-type: none"> <li>1. Initiate vascular access and titrate to a Systolic Blood Pressure (SBP) &gt; 90 mmHg.</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 total of 50 grams.</li> </ul> </li> <li>4. If IV access is unavailable or delay is anticipated, treatment options are:           <ul style="list-style-type: none"> <li>• Glucagon: 1 mg Intramuscular (IM), <b>OR</b></li> <li>• Dextrose 10-12.5 grams IO. If blood sugar remains ≤ 60 mg/dl, give additional</li> <li>• Dextrose 12.5-15 grams IO. May repeat for total of 50 grams.</li> </ul> </li> </ol>

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

- If IV access is unavailable and the blood sugar  $\leq 60$  mg/dl or decreased responsiveness continues for more than five (5) minutes after administration of Glucagon, IO access should be established.
1. In the event of glucometer failure, administer 10-12.5 grams of Dextrose or 1 mg of Glucagon based on clinical assessment.
  2. Cardiac monitoring.

**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. Airway adjuncts as needed.</li><li>3. Spinal motion restriction when indicated per PD# 8044.</li><li>4. Perform blood glucose determination.</li><li>5. If patient is seizing, protect the patient from further injury.</li><li>6. 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 no evidence of fluid overload, initiate vascular access, and administer a Normal Saline bolus of 500ml.</li><li>2. <del>ADVANCED</del> Airway adjuncts as needed</li><li>3. Cardiac monitoring.</li></ol>

**Cross Reference:** PD# 8044 – Spinal Motion Restriction

**Consider AEIOUTIPS:**

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|----------|--------------------------|
| Alcohol  | Trauma                   |
| Epilepsy | Infection                |
| Insulin  | Psychiatric              |
| Overdose | Stroke or Cardiovascular |
| Uremia   |                          |