

	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9005.21
	PROGRAM DOCUMENT:	Initial Date:	04/25/95
	Pediatric Decreased Sensorium	Last Approval Date:	09/09/21
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 Signature on File
 EMS Medical Director

 Signature on File
 EMS Administrator

Purpose:

- A. To ~~serve as the~~ **establish** treatment standard in treating pediatric patients with decreased sensorium.

Authority:

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

Protocol:

- A. The ability to maintain temperature in prehospital settings in pediatric patients is a significant problem with a dose dependent increase in mortality for temperatures below 37°C or 98.6°F. Simple interventions to prevent hypothermia can reduce mortality. During transport warm and maintain normal temperature, being careful to avoid hyperthermia.
- B. Perform blood glucose determination.
- C. **Suspected Hypoglycemia:**

BLS
1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use lowest concentration and flow rate of O2 as possible. 2. Basic Life Support (BLS) airway adjuncts as needed. 3. Spinal Motion Restriction (SMR) when indicated. 4. If patient is seizing, protect the patient from further injury. 5. If blood glucose is < 60 mg/dl: <ul style="list-style-type: none"> • Oral Glucose: Orange juice sweetened with sugar, regular soft drinks, candy, oral glucose paste, or dextrose. Only if the patient is alert and oriented. First have the patient do a swallow test of water, if tolerated, EMT-I may give glucose. 6. Begin immediate transport.
ALS
1. Initiate vascular access. Titrate to a minimal Systolic Blood Pressure (SBP) for patient's age. 2. If blood glucose > 60 mg/dl, consider other causes of decreased sensorium. 3. If blood glucose < 60 mg/dl, treat as follows: <ul style="list-style-type: none"> • Dextrose 0.5 gm/kg IV/IO to a maximum of 12.5 gm. 4. If blood sugar remains < 60 mg/dl, give additional: <ul style="list-style-type: none"> • Dextrose 0.5 gm/kg IV/IO to a maximum of 12.5 gm.

5. If IV access is unavailable or delay is anticipated, treatment options are:
 - Glucagon 0.5 mg Intramuscular (IM) if blood sugar < 60 mg/dl OR
 - Dextrose 0.5 gm/kg IO. If blood sugar remains ≤ 60 mg/dl, give additional:
 - Dextrose 0.5 gm/kg for a total of 1 mg/kg

NOTE: Concentrations of 10% Dextrose (D10) or 25% Dextrose (D25) may be used.

 - IO access should be established if IV access is unavailable and if the blood sugar < 60mg/dl or decreased responsiveness continues for more than five (5) minutes after administration of glucagon.
6. In the event of glucometer failure, administer 10-12.5 grams of Dextrose or 0.5 mg IM of Glucagon based on clinical assessment.
7. Cardiac monitor.

D. **Suspected Opiate Overdose:** Clinical findings may include pinpoint pupils, decreased sensorium, respiratory depression, respiratory insufficiency, bradycardia, or hypotension.

BLS
<ol style="list-style-type: none"> 1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use lowest concentration and flow rate of O2 as possible. 2. Basic Life Support (BLS) airway adjuncts as needed. 3. Spinal Motion Restriction (SMR) when indicated. 4. If patient is seizing, protect the patient from further injury. Begin immediate transport. 5. If mental status and respiratory effort are depressed and suspected opioid overdose: 6. Naloxone: Administer Intranasal (IN) Naloxone per policy 2523-Administration of Naloxone by Law Enforcement First Responders.
ALS
<ol style="list-style-type: none"> 1. Airway management as per policy 8837. 2. Initiate vascular access. Titrate to a minimal Systolic Blood Pressure (SBP) for patient's age. 3. Naloxone: 0.1 mg/kg IV/IN/IM push titrate to adequate respiratory status, or a maximum of 2.0 mg. 4. If no improvement, consider repeat doses two (2) times (total of three (3) doses), reassess after each dose. 5. Cardiac monitor.

E. **Seizures:** Active generalized seizing, focal seizing with respiratory compromise or recurrent seizures without lucid interval.

BLS
<ol style="list-style-type: none"> 1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use lowest concentration and flow rate of O2 as possible. 2. Basic Life Support (BLS) airway adjuncts as needed. 3. Spinal Motion Restriction (SMR) when indicated. 4. If patient is seizing, protect the patient from further injury. 5. Consider undressing the patient as a cooling measure if the seizure appears to be febrile in origin. 6. Perform blood glucose determination. 7. Transport.

ALS

1. Airway management as per policy 8837.
2. Perform finger stick blood glucose testing. If blood sugar is < 60mg/dl, go to suspected hypoglycemia.
3. If seizure activity has stopped and the level of consciousness is improving or remaining constant: continue transport.
4. If seizures are continuing, initiate vascular access. If needed titrate to a minimal SBP for patients age.
5. Continuous seizures:
 - Midazolam: IV- 0.1 mg/Kg (max dose 4 mg) slow IV push in 1 - 2 mg increments, titrate to seizure control
 - OR
 - Midazolam IM - 0.1 mg/kg (max dose 4 mg) OR-IN 0.2 mg/kg (max dose 6.0 mg)
6. **Diazepam: May substitute Diazepam when there is a SCEMSA recognized pervasive shortage of Midazolam.
 - Diazepam 0.1mg/kg IVP/IO to control seizures.
 - If no IV access:
 - Diazepam 0.1mg/kg IM. May repeat once. Max dose 5 mg.
8. Cardiac monitor.

F. The majority of seizures are self-limited with resolution before medication administration. Administration of Midazolam should only be used for continuous seizing and:

1. History of non-febrile seizures, or
2. Respiratory compromise, or
3. Emesis

G. Base Hospital Order: any other indication of seizure activity requiring medication administration.

**Diazepam may be used when Midazolam is not available or when using Diazepam from CHEMPACK supplies.

Cross Reference: PD# 9016 - Pediatric parameters
PD# 8837 - Pediatric Airway Management