

**COUNTY OF SACRAMENTO
EMERGENCY MEDICAL SERVICES AGENCY**



Program Document: **Pediatric Seizures**

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Signature on File

EMS Medical Director

Signature on File

EMS Administrator

Purpose:

- A. To establish treatment standards for pediatric patients exhibiting signs and symptoms of active seizures, focal seizures with respiratory compromise, or recurrent seizures without lucid interval.

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. For any Altered Level of Consciousness (ALOC), consider AEIOUTIPS:

Alcohol	Trauma
Epilepsy	Insulin
Infection	Psychiatric
Overdose	Stroke or Cardiovascular
Uremia	

BLS

1. Supplemental O2 as necessary to maintain SpO2 $\geq$ 94%. Use the lowest concentration and flow rate of O2 as possible.

2. Airway adjuncts as needed.
3. Apply spinal motion restriction when indicated per PD# 8044.
4. Protect the patient from further injury.
5. Check temperature and begin cooling measures if fever is the cause of the seizure.
6. Transport.

ALS

1. Airway adjuncts as needed.
2. If blood sugar ≤ 60 mg/dl, treat per PD# 9007 – Pediatric Diabetic Emergencies.
3. If seizure activity has stopped and the level of consciousness is improving or remaining constant: continue transport.
4. Continuous Seizure: Midazolam (IN/IM preferred route):
 - a. IM - 0.1 mg/kg (max dose 4 mg) **OR**
 - b. IN 0.2 mg/kg (max dose 6.0 mg)
 - c. IV 0.1 mg/Kg (max dose 4 mg) slow IV push in 1 - 2 mg increments, titrate to seizure control.
5. If seizures are continuing, initiate vascular access with NS, and titrate to a minimal SBP for the patient's age.
6. Cardiac Monitoring.
7. If seizures are continuing, initiate vascular access with NS, and titrate to a minimal SBP for the patient's age.

NOTES:

1. **May substitute Diazepam when there is a recognized pervasive shortage of Midazolam.
 - a. Diazepam 0.1mg/kg IV/IO to control seizures.
 - b. If no IV access is available:
 - c. Diazepam 0.1mg/kg IM. May repeat once. Max dose 5 mg.
2. Many seizures are self-limited with a resolution before medication administration. Administration of Midazolam should only be used for continuous seizing and:
 - a. History of non-febrile seizures, or
 - b. Respiratory compromise, or
 - c. Emesis
3. Base Hospital Order: any other indication of seizure activity requiring medication administration.

*Intranasal medications are to be delivered through an atomization device with one-half the indicated dose administered in each nostril.

Cross Reference:

PD# 2032 – Controlled Substance

PD# 8044 – Spinal Motion Restrictions (SMR)

PD# 9017 – Pediatric Trauma

PD# 9007 – Pediatric Diabetic Emergencies