	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9008.01
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	Pediatric Seizures	Last Approved Date:	12/09/21
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EMS Medical Director

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	Infection
Insulin	Psychiatric
Overdose	Stroke or Cardiovascular
Uremia	
Insulin Overdose	Psychiatric

### 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. Apply spinal motion restriction when indicated per PD# 8044.
- 4. Protect the patient from further injury.
- 5. Check temperature and begin cooling measures if febrile cause of seizure.
- 6. Transport.

### ALS

- 1. Airway adjuncts as needed.
- 2. If blood sugar  $\leq$  60 mg/dl, treat per PD# 9007.
- 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):
  - IM 0.1 mg/kg (max dose 4 mg) **OR**

- IN 0.2 mg/kg (max dose 6.0 mg)
- IV 0.1 mg/Kg (max dose 4 mg) slow IV push in 1 2 mg increments, titrate to seizure control
- 6. Cardiac Monitoring
- 7. If seizures are continuing, initiate vascular access, titrate to a minimal SBP for patient's age.

NOTES:

- 1. \*\*Diazepam: May substitute Diazepam when there is a recognized pervasive shortage of Midazolam.
  - Diazepam 0.1mg/kg IV/IO to control seizures.
    - If no IV access:
  - Diazepam 0.1mg/kg IM. May repeat once. Max dose 5 mg.
- 2. The majority of seizures are self-limited with resolution before medication administration. Administration of Midazolam should only be used for continuous seizing and:
  - History of non-febrile seizures, or
  - Respiratory compromise, or
  - Emesis
- 3. 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.

\*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