

**CENTRAL CALIFORNIA**  
**EMERGENCY MEDICAL SERVICES**  
A Division of the Fresno County Department of Public Health

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| Manual     | Emergency Medical Services<br>Administrative Policies and Procedures                 | Policy<br>Number 540.18 |
| Subject    | Critical Care Paramedic Treatment Protocols<br><br><b>MAGNESIUM SULFATE INFUSION</b> | Page 1 of 1             |
| References | California Code of Regulations Title 22, Division 9, Chapter 4                       | Effective<br>05/08/2020 |

**I. PURPOSE**

To authorize CCPs to monitor existing intravenous Magnesium Sulfate infusions during scheduled interfacility transport.

**II. POLICY**

- A. Only authorized CCPs will be permitted to monitor Magnesium Sulfate infusions during scheduled interfacility transports.
- B. CCPs may not initiate Magnesium Sulfate infusions.

**III. PROCEDURE**

- A. The following parameters shall apply to all patients with pre-existing Magnesium Sulfate infusions:
  - 1. Infusion rates must follow physician orders during transport with no regulation of rates being performed by the CCP, except discontinuation of the infusion.
  - 2. Infusion rates shall be consistent with Policy 540.02 Attachment A - CCEMSA CCP Transfer Form. Physician guidelines must specify the infusion rate within the CCP scope of practice.
- B. Infusions must be regulated by a mechanical pump familiar to the CCP. If a pump failure occurs and cannot be corrected, the CCP is to discontinue the Magnesium Sulfate infusion and notify the base hospital physician.
- C. Magnesium Sulfate infusions are not compatible with Amiodarone and Calcium.
- D. Magnesium Sulfate infusions will be mixed with NS or D5W.
- E. The CCP shall verify the correct concentration and infusion rate with the sending RN following moving the patient to the CCP's infusion pump.
- F. If medication administration is interrupted (infiltration, accidental disconnection, malfunctioning pump, etc.), the CCP may restart the line.
- G. Signed transfer orders from the transferring physician must be obtained prior to transport. Transfer orders must provide for maintaining Magnesium Sulfate infusion during transport and circumstances under which the rate will be maintained, adjusted or discontinued.

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| Approved By          | <b>Daniel J. Lynch</b>            | Revision |
| EMS Director         | (Signature on File at EMS Agency) |          |
| EMS Medical Director | <b>Jim Andrews, M.D.</b>          |          |
|                      | (Signature on File at EMS Agency) |          |

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- H. Patients shall be placed and maintained on cardiac monitor, pulse oximetry and ETCO<sub>2</sub> during transport.
- I. Throbbing or warmth at the IV site is a normal side effect of Magnesium Sulfate infusion. The CCP shall monitor for signs of infiltration.
- J. The CCP shall monitor for signs of Magnesium Sulfate toxicity. These include somnolence, muscular paralysis, or respiratory depression. If any of these occur, immediately stop the Magnesium Sulfate infusion. Flush the IV line and contact base hospital for orders. In radio failure, Calcium Chloride can be used to reverse Magnesium Sulfate toxicity (1 gram over 1 minute IV, may repeat once to a maximum of 2 grams).