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|  | <b>COUNTY OF SACRAMENTO</b><br>EMERGENCY MEDICAL SERVICES AGENCY   | Document #  | 8044.13  |
|   | <u>PROGRAM DOCUMENT:</u><br><b>Spinal Motion Restriction (SMR)</b> | Draft Date: | 06/01/92 |
|   |  | Effective:  | 11/01/18 |
|   |  | Revised:    | 08/16/18 |
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 EMS Medical Director

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**Purpose:**

- A. To serve as the prehospital care standard for under which prehospital personnel may utilize spinal motion restriction (SMR) for patients with traumatic injuries and establish the requirements and procedures for spinal restriction for patients with traumatic injuries.

**Authority:**

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

**Indications for SMR:**

- A. Indications for SMR following blunt trauma include:
  - 1. Acutely altered level of consciousness(e.g. GCS<15, evidence of intoxication)
  - 2. Midline neck or back pain and/or tenderness
  - 3. Focal neurologic signs or symptoms (e.g. numbness or motor weakness)
  - 4. Anatomic deformity of the spine
  - 5. Distracting circumstances or injury (e.g. long bone fracture, degloving or crush injuries, large burns, emotional distress, communication barrier, etc) or any similar injury that impairs a patient’s ability to contribute to a reliable examination
- B. If the above criteria are not met, but there is still suspicion of spinal column or spinal cord injury, the patient should be placed in SMR.
- C. Prehospital providers may utilize SMR for any trauma patient who based on their clinical assessment may have suffered a spinal injury.
- D. There is no role for SMR in penetrating trauma

**Procedure:**

- A. All patients suffering traumatic injuries shall be assessed for the possibility of spinal injury, including history and exam including neurologic exam of all extremities, and inspection and palpation of the entire spine.
- B. Establish and secure airway while maintaining neutral inline immobilization.
- C. Access the head and neck for obvious injuries and distended neck veins while providing neutral in-line immobilization for the head and neck.
- D. Apply an extrication or rigid collar and continue to maintain neutral in-line immobilization.
- E. Secure the patient to a long spine board, short board, or KED as appropriate.
  - 1. The best use of long spine boards (LSB) may be for extricating the unconscious patient, or providing a firm surface for compressions
  - 2. Patients who are ambulatory at the scene of blunt trauma in general do not require immobilization via LSB but may require cervical collar and spinal precaution

3. Whether or not LSB is utilized, spinal precautions are still very important in patients at risk for spinal injury. Adequate spinal precautions may be achieved by placement of a hard cervical collar and ensuring that the patient is secured tightly to the stretcher, ensuring minimal movement and patient transfers, and manual in-line stabilization during any transfers

F. Transport.

**Special Notes:**

- A. Moving the head into a neutral in-line position is contraindicated if:
  1. There is pain upon starting movement
  2. There's muscle spasm or back pressure upon attempting movement
  3. Patient holds head angulated (tilted) to the side and patient cannot move head
  4. The head is rigidly held to one side
  5. The maneuver cannot be safely achieved due to space or other considerations
- B. In these cases the patient shall be immobilized in the position in which he/she is found. SMR does not take precedence over airway, respiratory, and cardiovascular stabilization of the critical trauma patient.
- C. For patients who are > 65 or < 5 years of age, consider SMR.
- D. Patients in SMR in an MCI are considered delayed.

