



CLINICAL STANDARD OF PRACTICE

APPROVED BY: MAB

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**TITLE:** Pre-hospital spinal motion restriction (Revised 2015)

**PURPOSE:** To insure that patients are having proper spinal motion restriction decisions made in the field and are not undergoing full spinal immobilization needlessly. *Use of a long spine board should be limited to extrication and transferring of the patient to the EMS cot and not as a transporting device on an EMS cot.*

**GOALS:** To be able to assure proper patient selection in spinal motion restriction

**DEFINITIONS:**

**Spinal Motion Restriction:** the application of a cervical collar and the maintenance of the spine in neutral alignment on an ambulance cot.

**Full Spinal immobilization:** the application of a cervical collar and securing a patient to a long backboard for full immobilization of the patient's spine.

**INDICATIONS :** Spinal Motion restriction:

- If the patient has injuries resulting from penetrating trauma (i.e. stab wound, gun shot wound etc.) and does not have any neurological deficits, then **neither** spinal motion restriction precautions or full spinal immobilization are required for the patient.
- If the patient has injuries from penetrating trauma and does have neurological deficits, then only spinal motion restriction will be utilized.

- If the patient has injuries resulting from blunt trauma, (i.e. MVC, pedestrian struck, falls etc.), then only spinal motion restriction will be utilized.

**INDICATIONS** : Spinal Immobilization

- If the patient has suffered blunt trauma and is to be flown from the scene by a medevac unit, then full spinal immobilization must be utilized until the patient is placed on the medevac stretcher or onto the medevac skid. At that point, if the medevac crew and time will allow, the patient can be removed from the full spinal immobilization for the transport.

**CONTRAINDICATIONS** : NONE

**PROCEDURE:**

**Penetrating trauma:**

Patients sustaining penetrating trauma that ***do not*** exhibit neurological deficit ***do not*** need to have spinal motion precautions utilized. The patient is to be placed supine on the ambulance cot with the head at approximately 20° to 30°.

If the patient exhibits a neurological deficit, spinal motion restrictions shall be utilized by placing a cervical collar on the patient and then placing the patient supine on the ambulance cot with the head at approximately 20° to 30°.

**Blunt trauma**

Patients that have suffered a blunt trauma injury shall have spinal motion restrictions utilized by placing a cervical collar on the patient and then placing the patient supine on the ambulance cot with the head at approximately 20° to 30°. The patient can be transferred to the EMS cot by a long spine board, but is not to be transported to the hospital on the long spine board.

### **Method of transfer of patient**

If the patient can manipulate themselves out of the situation, they can move themselves to the EMS cot, or a long spine board can be used to transfer the patient to the EMS cot. If the patient cannot manipulate themselves out of the situation, then the patient will be placed on a long spine board or scoop type stretcher and transferred to the EMS cot.

Once on the EMS cot, the transfer devices will be removed from under the patient. If a long spine board is used, one of two methods can be used for removal. The board can be removed by the long-axis method, where the board is removed from the foot of the patient, or the log roll method, where the patient is log-rolled to a side and the board is removed from the patient. If the patient is transferred on a scoop stretcher, it shall be separated and removed from under the patient.

### **Transfer of patient at the hospital**

When you arrive at the hospital, the patient can be transferred off the EMS cot to the hospital stretcher by using a slide board at the hospital or by a taught sheet under the patient. The move shall be slow, gentle and purposeful and not quick and jerky in nature.

### **SPECIAL CONSIDERATION:**

#### **Patients found in full spinal immobilization prior to arrival of ALS**

If a patient is found by ALS in full spinal immobilization by BLS prior to their arrival, a neurological exam will be completed by the paramedics and if it will not delay the transport of the patient to the trauma center, the patient will be removed from the long spine board and placed on the ambulance cot, with a cervical collar in place and the head of the cot at approximately 20° to 30°. Removal from the board will be by the long-axis method, where the board is removed from the foot of the patient, or the log roll method, where the patient is log-rolled to a side and the board is removed from the patient.

If the transport time to the hospital is short and transport of the patient will be delayed by removing the patient from full spinal immobilization, then the patient will remain in the full spinal immobilization on the long backboard to the trauma center.

If the patient is found to be in a vest type immobilization device (i.e. KED), the same procedure as above should be followed.

All findings for making a decision to follow the particular section of the spinal motion precaution procedure must be fully documented in the narrative of the PCR.

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