

SPINAL MOTION RESTRICTION

1. Level: EMT, AEMT, Paramedic, RN
2. Clinical Indications: Maintain the spine in anatomic alignment and minimize gross movement with use of a cervical collar as determined by the [SPINAL MOTION RESTRICTION Protocol](#).
3. Procedure:
 - 3.1. Gather a c-collar or similar device/materials in order to perform spinal motion restriction.
 - 3.1.1. Some patients, due to size or age, will not be able to receive spinal motion restriction with standard c-collars. Never force a patient into a non-neutral (hyperextension) position to apply a c-collar. Alternatively, liberal use of padding to restrict movement may be the best that can be done.
 - 3.1.2. Some agitated patients and children will not tolerate spinal motion restriction. The risks of further agitating the patient resulting in wild movements may outweigh the benefits of spinal motion restriction. In these cases, the agitation and steps taken to limit spinal movement should be documented.
 - 3.2. Explain the procedure to the patient.
 - 3.3. Assess pulse, motor and sensory function before beginning spinal motion restriction.
 - 3.4. Place an appropriately sized c-collar while maintaining in-line stabilization of the c-spine. This stabilization, to be provided by a second rescuer, should not involve traction or tension but rather simply maintaining the head in a neutral, midline position while the first rescuer applied the collar. Assure there is no hyperextension of the neck during the application process or once spinal motion restriction is complete.
 - 3.5. Once the collar is secure, the patient should be placed on the stretcher in a position of comfort. Use of adjunct moving devices such as the scoop stretcher or stair chair are recommended if the stretcher is not immediately accessible to the patient. Manual in-line stabilization should be provided during any gross patient movement or transfer between movement devices (i.e., stair chair to stretcher, stretcher to hospital bed, etc.)
 - 3.6. Provide instructions to the patient regarding the need to limit movement as much as possible.
 - 3.7. Stabilize the patient with the stretcher straps and shoulder harness.
 - 3.8. Reassess pulse, motor and sensory function after the patient has been secured to the stretcher.
 - 3.9. In cases of multiple patients and unless otherwise contraindicated, patients with spinal motion restriction may be repositioned to the bench seat once in the ambulance and transported in a seated position.
4. Long Spine Boards
 - 4.1. The routine use of a long spine board is no longer indicated as a therapeutic intervention or as a precautionary measure in the pre-hospital setting.
 - 4.2. Long spine boards may be helpful to minimize movement and to reduce the risk of further injury to patients presenting with multiple trauma. In these cases, spine board straps and the head immobilizer should be used in conjunction with the spine board.
 - 4.3. Long spine boards may be used as an extrication or patient movement device however if the patient will remain on the spine board for transport, the patient should be secured with spine board straps and the head immobilizer.
 - 4.3.1. If ample assistance is available, a patient may be removed from a long spine board onto the stretcher while maintaining the spine in anatomic alignment.

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5. Scoop Stretcher
 - 5.1. Use of the scoop stretcher is a great alternative to long spine boards for patient extrication and/or movement.
 - 5.2. Once the patient is placed on the stretcher, the scoop can be unlatched and the device may be removed from underneath the patient.
6. Special Considerations
 - 6.1. Pediatric Patients < 5 Years
 - 6.1.1. For pediatric patients already secured in a NHTSA approved child safety seat, allow the child to remain in the child safety seat and use liberal padding to maintain spinal motion restriction.
 - 6.1.2. When a NHTSA approved safety seat is not available, use the PediMate to secure the child to the stretcher. Attempt to keep the child calm and attempt to avoid unnecessary spinal movements.
 - 6.2. Helmet removal from injured patients
 - 6.2.1. Football helmet-The National Athletic Trainer Association now recommends that protective athletic equipment be removed prior to transport to an emergency facility for an athlete-patient with suspected cervical spine instability. The recommendation also states that equipment removal should be performed by at least three rescuers trained and experienced with equipment removal at the earliest possible time after enough trained individuals arrive on scene.
 - 6.2.1.1. In situations in which an adequate number of trained personnel are at the patient's side, EMS personnel should function in a supportive role of those trained in equipment removal.
 - 6.2.1.2. In cases in which the helmet has been removed, shoulder pads should be removed as well.
 - 6.2.1.3. In situations in which an adequate number of trained personnel are not at the patient's side, the face mask should be removed immediately when the decision is made to transport, regardless of current respiratory status.
 - 6.2.2. Motorcycle helmet
 - 6.2.2.1. It is recommended that the helmet be removed due to not having a removable mask, are not snugly fit to the head and worn without shoulder pads.
7. Documentation
 - 7.1. Spinal Motion Restriction should be documented on the ePCR in the flowchart section when Spinal Motion Restriction has been accomplished and the patient is transported on the stretcher or the bench seat.
 - 7.2. Spinal Motion Restriction/Long Spine Board should be documented on the ePCR in the flowchart section when the Spinal Motion Restriction has been performed and the patient is transported on a long spine board regardless if the patient was placed on the spine board by first responders prior arrival or by LaSalle personnel.
 - 7.2.1. Documentation in the narrative should provide further information as to why the patient was transported on a long spine board.
 - 7.2.2. Document the results of the neuro exam before and after spinal motion restriction in the ePCR.

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- 7.2.3. In cases in which a patient refuses the use of a cervical collar despite having a mechanism of injury to support spinal motion restriction and has been informed of the possible consequences of refusing, complete the “Patient Refused Treatment/Transport Signature” within the ePCR or an Against Medical Advice form prior to transport.