



## Section 14: Appendix 2: Medical Procedures

### SECTION 14: CERVICAL SPINAL MOTION RESTRICTION

E	EMT	E
A	AEMT	A
P	PARAMEDIC	P

INDICATIONS	SIGNS AND SYMPTOMS	CONTRAINDICATIONS
<ul style="list-style-type: none"> <li>Need for spinal immobilization as determined by protocol</li> </ul>	<ul style="list-style-type: none"> <li>Suspected traumatic injury</li> <li>Unresponsive / altered LOC of unknown mechanism</li> <li>Mechanism of Injury</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient training</li> </ul>

#### PROCEDURE

- Gather a backboard, straps, C-collar appropriate for patient's size, tape, and head blocks or similar device(s) to secure the head.
- Explain the procedure to the patient.
- Place the patient in an appropriately sized C-collar while maintaining manual in-line stabilization of the 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.
- Once the collar is secure, the second rescuer should still maintain their position to ensure stabilization.
- Place the patient on a long spine board with the log-roll technique if the patient is supine or prone. For the patient in a vehicle or otherwise unable to be placed prone or supine, place them on a backboard by the safest method available that allows maintenance of inline spinal stability.
- Stabilize the patient with straps and head rolls / tape or other similar device. Once the head is secured to the backboard, the second rescuer may release manual in-line stabilization.
- NOTE: Some patients, due to size or age, will not be able to be immobilized through inline stabilization with standard backboards and C-collars. Never force a patient into a non-neutral position to immobilize them. Such situations may require a second rescuer to maintain manual stabilization throughout the transport to the hospital.
- Document the time of the procedure in the patient care report (PCR).

**SEE SPINAL MOTION RESTRICTION PROTOCOL**



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### SECTION 14: CERVICAL SPINAL MOTION RESTRICTION-Cont.

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#### KEY POINTS

- Use of a backboard for stabilization injuries other than the neck or to move the patient, does not automatically require cervical immobilization.
- Use of cervical immobilization in adult trauma patients, should always be followed with long board immobilization, including straps.
- Never leave patients alone if they are fully immobilized. Be prepared to turn the long board while maintaining c-spine stabilization if the patient begins to vomit to maintain their airway.
- A c-collar by itself does NOT adequately immobilize the patient.
- **PROPERLY DOCUMENT THE DECISION TO NOT PROVIDE CERVICAL SPINE IMMOBILIZATION!!**

#### Trauma:

In trauma cases the neck should be immobilized under any of the following circumstances:

- The patient complains of neck pain, pain on palpation, or pain with range of motion.
- The patient complains of numbness, tingling, or motor weakness in any extremity.
- Mechanism of injury with other distracting injuries.
- The patient has a head injury, altered mental status, or language barrier, which limits the patient's ability to describe pain, numbness or weakness.
- The patient has a head injury or altered mental status that limits their ability to describe pain, numbness or weakness.
- Mechanism of injury with patient intoxication.
  1. If the history suggests a mechanism of injury, which could result in cervical injury in a patient who is intoxicated, cervical immobilization must be provided whether or not the patient is alert and oriented.
  2. This does not mean that every grossly intoxicated patient who is unable to provide reliable responses should have cervical immobilization.
    - A. If the mechanism of injury is such that a neck injury is not a reasonable possibility, cervical immobilization is not indicated. (For example, if a call involves a grossly intoxicated person who has an isolated ankle injury after a simple fall.)
- Any time the paramedic or EMT judges that cervical immobilization is necessary.

#### Pediatric Considerations:

Small children (less than 8 years of age) have relatively large heads. Use of standard cervical immobilization and backboards will result in cervical flexion. Use a immobilization method that avoids flexion of the neck. Current approved methods include, but are not limited to;

- Devices which have a recess for the child's occiput (Pedi-pak with padding applied).
- Placing the patient into the sniffing position by placing padding under the shoulders and lower back.
- Cervical collars should be used along with any of these modifications, unless there is not an appropriate size c-collar. If a circumstance prevents the use of a c-collar, other approved methods of immobilization include;
  1. Manual immobilization
  2. Blanket or towel roll immobilization
  3. Tape immobilization