

# Spinal Motion Restriction

## Clinical Indications:

1. Spinal motion restriction (SMR) as determined by spinal injury assessment:
  - a. Pain upon palpation of spine; or
  - b. Neurological deficits

### Applies to:

E	EMT
P	Paramedic

## Procedure:

1. Explain the procedure to the patient; assess and record extremity neuro status & distal pulses.
2. Place the patient in an appropriately sized C-collar while maintaining in-line stabilization of the cervical spine by a second provider.
3. Methods used to achieve SMR that are allowable for pain upon palpation (less restrictive to most restrictive):
  - a. Semi-fowler's or fowler's position with cervical collar or towel rolls only;
  - b. Pillows or blanket to fill voids (i.e., behind knees, lower back);
  - c. Supine on a gurney; or
  - d. Children's car seat.
4. Methods used to achieve SMR that are allowable for neurological deficits (less restrictive to most restrictive):
  - a. KED; or
  - b. Backboard with adequate padding, head immobilizers, and straps.
5. Stabilize the patient with straps and head rolls or other similar device. Once the head is secured, the second provider may release manual in-line stabilization.
6. Assess and record extremity neuro status and distal pulses post-procedure. If worse, remove any immobilization devices and reassess.

## Exclusion Criteria:

1. The need for spinal motion restriction may be deferred for patients who demonstrate ALL of the following findings on assessment:
  - a. Age < 55 years;
  - b. Absence of tenderness at the posterior midline of the spine;
  - c. Absence of focal neurological deficit;
  - d. Normal mentation;
  - e. Ability to communicate well independently or through an interpreter;
  - f. No evidence of intoxication or impairment due to drugs or alcohol; and
  - g. No clinically apparent painful injury that might distract from the pain of spinal injury.

## Note:

1. SMR should reduce, rather than increase, patient discomfort. SMR that increases pain should be avoided. The cervical spine should never be moved if movement increases pain or in the presence



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of neurological deficits or neck spasms.

2. Suspected spinal injuries should be maintained in a neutral position; position will vary by patient.
3. Routine use of full spinal motion restriction should be reserved for patients with confirmatory physical findings or high suspicion of spinal injury.
4. AMS or presence of an entry/exit wound in proximity of spine are no longer indications for SMR.

