



Jackson Hole Fire/EMS Operations Manual

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Title: **Treatment Protocol:
Spinal Immobilization
Criteria**

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SPINAL IMMOBILIZATION CRITERIA (Procedure Guidelines)

SCOPE OF PRACTICE: EMT-A, EMT-I, Paramedic

PURPOSE

This protocol applies to patients that have sustained a mechanism of trauma that could cause a spine injury, and then determine if spinal immobilization is required.

SPINAL IMMOBILIZATION CRITERIA

- Assess for mechanism of spine injury. If a significant or uncertain mechanism exists, protect the spine initially by hand stabilization in the in-line position, until a detailed exam can be performed.
- Do a thorough evaluation including a history and physical examination. In patients with sufficient trauma to potentially cause a spine injury, the patient must meet all of the following criteria in order to be transported without spinal immobilization:
 1. Patient must be reliable with normal level of alertness without language barrier. The patient must be cooperative, sober, and alert to person, place, time, and events.
 2. Patient must be free of other distracting injuries significant enough to mask the pain and tenderness of a potential spine injury. "Significance" will vary based on the pain tolerance of the patient and ability to focus on your detailed exam.
 3. Patient must be free of midline spine tenderness.
 4. Patient must have normal motor/sensory function in all four extremities
 - Pt must be able to spread fingers and push/pull toes with equal strength
 - Normal sensation to sharp/pinprick and light touch in all four extremities currently, and no history of such findings since event (even if neurological symptoms have since resolved, they should still receive spinal immobilization).
 - If reduced function in a particular extremity can be attributed with certainty to a condition unrelated to a potential spine injury (elbow fracture that injures the radial nerve and causes wrist drop), that deficit alone will not require spinal immobilization.
- If the patient meets all four above criteria, then the patient must be able to move their head slowly from side to side and forward and backwards without significant pain. Minor muscular pain can be acceptable as long as no other complaints of numbness, tingling, or significant pain is incurred. If they are unable or unwilling to move head, then they should be immobilized.
- Patients who need spinal immobilization are determined by the above criteria, not mechanism of injury alone. If a patient **can** successfully meet all the above criteria, then they do not require spinal immobilization. This should be carefully documented.

- If the patient **fails to** meet any one of the above criteria, then a spine injury should be suspected and the patient must be placed in spinal immobilization. This should be done by using a combination of cervical collar, head blocks, strapping, and backboard (or other appropriate devices). Complete spinal immobilization should allow the patient to be turned on their side without movement of the spine.
- Patients in extremis with a mechanism of trauma should be immobilized and rapidly transported, without delay in performing this selective spinal immobilization.
- Careful neurological monitoring should be documented before and after spinal immobilization.
- Continue care and transport to hospital.

