

**CENTRAL CALIFORNIA**  
**EMERGENCY MEDICAL SERVICES**  
A Division of the Fresno County Department of Public Health

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| Manual:     | Emergency Medical Services<br>Administrative Policies and Procedures | Policy<br>Number: 510.06 |
| Subject:    | Basic Life Support (BLS) Protocols                                   | Page: 1 of 3             |
|             | <b>SPINAL IMMOBILIZATION</b>                                         |                          |
| References: | California Administrative Code, Title 22,<br>Division 9, Chapter 2   | Effective: 11/15/83      |

**I. SPINAL IMMOBILIZATION**

**A. Goals:**

1. Decrease/minimize use of backboards.
2. Reserve full spinal precautions use to high-risk patients.
3. Reduce complications associated with full spinal immobilization.
4. Facilitate extrications.
5. Use resources efficiently.
6. Increase patient comfort and satisfaction.

**B. Terms:**

1. Neurological Signs or Symptoms: paraesthesia, numbness, weakness, paralysis, asymmetric movements or gait, pain inhibiting neck movement. New or worsened signs or symptoms in a patient with a pre-existing deficit(s).
2. Ambulatory Patient: a patient who ambulates with a steady, strong, symmetric gait and does not require assistance to move (if previous gait disturbance, no change in patient's normal gait).
3. Neck/Back Support: support provided manually, or by towels, blankets, or soft collar to minimize movement, compression, or distraction of the spine.
4. Full Spinal Precautions: KED, backboard with blocks, straps and tape, break-away flat with blocks and tape, vacuum splint, etc.
5. Altered Mental Status: inability to follow simple commands or inconsistency in following simple commands.

|                                      |                                                               |                   |
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| Approved By:<br>EMS Division Manager | <b>Daniel J. Lynch</b><br>(Signature on File at EMS Agency)   | Revision:         |
| EMS Medical Director                 | <b>Jim Andrews, M.D.</b><br>(Signature on File at EMS Agency) | <b>01/01/2015</b> |

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C. Policy:

1. Ambulatory Patients:

- a. Ambulatory patients without neurological signs or symptoms, without complaints of neck/back pain, and without neck/back tenderness to palpation should be transported in position of comfort.
- b. Ambulatory patients with complaints of neck /back pain, or neck/back tenderness, without neurological signs or symptoms, should be transported on a gurney in position of comfort. Their neck/back can be supported as needed.
- c. Ambulatory patients with neurological signs or symptoms after trauma, or suspected trauma, need full spinal precautions.

2. Non-Ambulatory Patients:

- a. Non-ambulatory patients without neurological signs or symptoms, without complaints of neck/back pain, and without neck/back tenderness to palpation should be transported in position of comfort.
- b. Non-ambulatory patients with complaints of neck /back pain, or neck/back tenderness, without neurological signs or symptoms, should be transported on a gurney in a supine position. Their neck/back must be supported until placed on the gurney (manual, KED). Once on the gurney, their neck/back can be supported as needed.
- c. Non-ambulatory patients with neurological signs or symptoms after trauma, or suspected trauma, need full spinal precautions.
- d. Non-ambulatory patients with an altered mental status should be transported in full spinal/back precautions.

3. Severe Blunt Multisystem Trauma:

- a. Patients with severe blunt multisystem trauma should be transported using KED, break-away flat, or backboard to expedite bed transfers in severely injured patients.

4. Penetrating Trauma

- a. If both blunt and penetrating trauma occur, manage as if severe blunt multi-system trauma.

5. The following is a chart summary regarding when spinal immobilization should be considered.

| <b>Spinal Immobilization Chart</b> |                         |                                                            |                             |                       |
|------------------------------------|-------------------------|------------------------------------------------------------|-----------------------------|-----------------------|
|                                    | No neck pain/tenderness | Neck pain/tenderness                                       | Neurological signs/symptoms | Altered Mental Status |
| Ambulatory                         | Position of Comfort     | Gurney Position of Comfort with/without support            | Full                        | Position of Comfort   |
| Non-Ambulatory                     | Position of Comfort     | Gurney supine Position of Comfort with extrication support | Full                        | Full                  |
| Severe Blunt Multisystem Trauma    | Full                    | Full                                                       | Full                        | Full                  |
| Penetrating Trauma                 | Position of Comfort     | Gurney supine Position of Comfort with extrication support | Full                        | Full                  |

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NOTE: If a patient does not meet requirements to be transported in full spinal precautions, this does **NOT** mean they are “cleared” from having a spinal injury. Significant injuries may be present and further evaluation is needed.

NOTE: Patients with isolated non-traumatic mid-to-low back pain do not need immobilization of the cervical spine. Immobilization of the mid and lower spine is sufficient in these cases.

NOTE: The Paramedic should consider removing C-spine immobilization on any patient who does not meet the above criteria and is placed in C-spine immobilization prior to the paramedic’s arrival (i.e., first responders).

NOTE: If a child car seat is available, this device can be utilized for extrication support or spinal immobilization.