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.
**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.

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<th>Spinal Immobilization Chart</th>
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<td>Severe Blunt Multisystem Trauma</td>
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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.