PURPOSE:

The purpose of this policy is to provide direction to prehospital personnel on the application of cervical spine immobilization and to reduce the risk of negative effects caused by traditional spinal immobilization. The goal is to prevent gross movement of the spine while using the simplest most effective means possible to ensure comfort, airway management, and stabilization of the spine.

AUTHORITY:

Health and Safety Code, Division 2.5, Section 1797.220 & 1798 et seq.;

POLICY:

I. The San Joaquin County EMS Agency is supporting efforts to decrease unnecessary immobilization in the field and reduce the risks and complications associated with traditional spinal immobilization. Studies show immobilizing trauma patients may cause more harm than good to the patient especially penetrating trauma patients (stabbings and gunshot wounds) which benefit most from rapid assessment and transport to a trauma center.

II. When applying spinal stabilization techniques the goal is to prevent gross movement of the spine while using the simplest most effective means possible to provide for sure patient comfort and the delivery of patient care including airway management, and stabilization of the spine.

III. Prehospital personnel shall apply cervical spine immobilization to patients injured from blunt force trauma in the following circumstances:

A. Conscious patients exhibiting one or more of the following signs or symptoms:
   1. Posterior midline cervical tenderness or pain;
   2. Distal numbness, tingling, weakness, or paresthesia;
   3. Paralysis;
   4. Neck guarding or restricted range of motion;
   5. Glasgow Coma Scale (GCS) motor score of less than 5 as a result of blunt force trauma or intoxicants, e.g. alcohol or other drugs.

B. Unconscious adult patients or patients unable to be assessed for spinal injury suffering a blunt force mechanism of injury, except ground level falls.

IV. Prehospital personnel shall not apply cervical-spine immobilization.

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to patients in the following circumstances:

A. Patients injured solely from penetrating trauma (e.g., stabbing, gunshot wound);
B. Unconscious adult patients experiencing a ground level fall;
C. Patients in cardiac arrest.

IV.-VI. Pediatric cervical spine immobilization stabilization shall be performed as follows:

A. Cervical spine immobilization stabilization shall be conducted using the X-Collar™, or a soft collar and should be immobilized using a Kendrick Extrication Device (KED) or a combination of blankets and pillows, or other commercially available device approved by the EMS Agency.

B. Pediatric Patients and Car Seats:

1. Infants restrained in a rear-facing car seat may be immobilized stabilized and extricated in the car seat. The child may remain in the car seat if the immobilization-stabilization is secure and his/her condition allows (no signs of respiratory distress or shock.)

2. Children restrained in a car seat (with a high back) may be immobilized-stabilized and extricated in the car seat; however, once removed from the vehicle, the child should be placed in a x-collarX-Collar™ or a -padded pediatric immobilization-stabilization device or other commercially available immobilization-stabilization device approved by the EMS Agency. If placing the child in the pediatric immobilization-stabilization device causes increased agitation, movement, and potential further harm, the child may be immobilized-stabilized in the car seat.

3. Children restrained in a booster seat (without back) need to be extricated using standard techniques and immobilized-stabilized using a x-collarX-Collar™ or padded pediatric immobilization stabilization device or other commercially available immobilization stabilization device approved by the EMS Agency.

4. If applying spinal-spine immobilization-stabilization to a patient in a car seat, prehospital personnel shall conduct a posterior assessment by palpation.

V. VII. Adult cervical spine immobilization stabilization shall be performed by selecting the most effective methods and tools for the specific situation with the goal to prevent gross movement of the spine while allowing necessary treatment including airway management.

VIII. Equipment approved to perform cervical spine immobilization stabilization includes the x-collarX-Collar™, or a soft collar and a Kendrick Extrication
Device (KED) or Fasplint or similar device, or any combination of equipment including pillows and blankets or other commercially available immobilization device approved by the EMS Agency to ensure comfort, airway management and spinal immobilization stabilization on the gurney.

A. With some exceptions that are incident specific, X-Collar™ should be considered before all other devices.

B. For those incidents characterized by extrication challenges, the soft collar and KED may be the best device.

A.C. Patients whose anatomy is not conducive to the use of either the X-Collar or the KED (such as those with severe kyphosis or morbid obesity) may require alternate methods including blankets and pillows.

VI.IX. Long backboards and Miller Boards may be used for extrication or movement at the scene. However, backboards shall not be used to transport a patient to the hospital.

VII.X. Movement on scene:

A. Pull sheets, other flexible devices, scoops, scoop-like devices may be used. Unpadded long backboards should have limited utilization.

B. If an unpadded longboard or scoop stretcher device is used to move patients on scene due to issues of space or distance, such devices should only be used as a temporary means of transporting the patient to a gurney prior to the application of the KED or other approved immobilization stabilization method.

C. Keeping with the goals of restricting gross movement of the cervical spine and preventing further pain and discomfort, patient self-extrication is allowable.

VIII.XI. Special Considerations:

A. Patients who are agitated or restless due to shock, hypoxia, head injury or intoxication may be impossible to immobilize stabilize adequately. It may be necessary to remove immobilization stabilization devices or modify immobilization techniques to reduce the risk of further injury.

A.B. Patients with severe kyphosis (malformation of the spine) (kyphosis or scoliosis), morbid obesitye patients or other anatomical or medical complications (difficult airway management) may best be stabilized require modified spine stabilization utilizing using a combination of pillows, blankets or other devices approved by the EMS Agency.

B.C. Paramedics may discontinue or clear spinal immobilization stabilization initiated by BLS personnel, if in the opinion of the paramedic cervical spine
stabilization is not required by policy or compromises the ability to render patient care. Paramedics are required to document on the patient care record each instance of discontinuing cervical spine immobilization stabilization and their basis for removal.

C.D. When performing spinal immobilization, patients may be placed in semi or high fowlers position to address respiratory conditions or for patient comfort.

D.E. Prohibited equipment and practices:
1. Hard cervical collars;
2. Adhesive tape applied to the patient’s skin.

IX.XII. EMS Policy No. 5506 BLS Spinal Immobilization is hereby rescinded.