



Spinal Motion Restriction

BLS PROCEDURE BP-05

INDICATIONS	<ul style="list-style-type: none">• Blunt or penetrating trauma with possibility of spinal injury. Refer to Spinal Motion Restriction Algorithm for specific guidance.
PROCEDURE	<p>SPINAL MOTION RESTRICTION</p> <ul style="list-style-type: none">• Explain the procedure to the patient; assess and record extremity neuro status & distal pulses.• Place the patient in a rigid cervical collar while a second provider is maintaining in-line stabilization of the cervical spine.• If indicated, place the patient on a padded backboard or equivalent.• 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.• Assess and record extremity neuro status and distal pulses post-procedure. If worse, remove any immobilization devices and reassess. <p>PEDIATRIC SPINAL MOTION RESTRICTION</p> <ul style="list-style-type: none">• Infants restrained in a rear-facing car seat may be immobilized and extricated in the car seat. The child may remain in the car seat if the immobilization is secure and his/her condition allows (no signs of respiratory distress or shock).• Children restrained in a car seat (with a high back) may be immobilized and extricated in the car seat; however, once removed from the vehicle, the child should be immobilized.• Children restrained in a booster seat (without a back) need to be extricated and immobilized following standard spinal motion restriction precautions.• As clinically indicated, utilize padding for the pediatric patient's head, shoulders, and/or torso to facilitate proper neutral spinal motion restriction.• When no child restraint device is available or applicable, pediatric patients should be immobilized using a vacuum splint/mattress. <p>HELMET REMOVAL</p> <ul style="list-style-type: none">• High impact helmets (e.g. motorcycle, car racing): Whether the helmet is a closed or open-faced style helmet, the helmet must always be removed while providing spinal precautions.• Low impact helmets with shoulder pads (e.g. football, ice hockey, etc.): In those patients wearing a well-fitted helmet which conforms closely to the patient's head, leave the helmet and shoulder pads in place after removing the face mask. If the helmet is removed, the shoulder pads must also be removed to maintain neutral spinal alignment.• Low impact helmets without shoulder pads (e.g. baseball, bicycle, rollerblade, etc.): Whether the helmet is a closed or open faced style helmet, the helmet must always be removed while providing spinal precautions.• Explain the procedure to the patient, assess and record extremity neuro status & distal pulses before and after helmet removal.• While gently removing the helmet, maintain stabilization of the cervical spine. If indicated, place the patient in spinal motion restriction.

KEY CONCEPTS

- Backboards must be appropriately padded to prevent pain and pressure sores.
- Spinal movement and discomfort are reduced by allowing patients to self-extricate when possible and place themselves onto gurneys and spinal motion restriction devices.
- High-risk patients (e.g. elderly, osteoporotic, degenerative disorders, diabetic patients, etc.) may present with minimal or no pain following a spinal injury.
- If the patient is > 20 weeks gestation and full spinal precautions is indicated, take steps to minimize supine hypotension syndrome.

SPINAL MOTION RESTRICTION ALGORITHM

