

<b>SPINAL MOTION RESTRICTION (SMR)</b>	
<b>ADULT</b>	<b>PEDIATRIC (≤34 KG)</b>
<b>BLS Procedures</b>	
<ul style="list-style-type: none"> <li>• Universal Protocol #601</li> <li>• <b>SMR should be considered for <i>high risk trauma</i> patients whose injuries/complaints may indicate spinal cord damage, including:</b> <ul style="list-style-type: none"> <li>○ High energy blunt trauma (i.e. Step 3 Trauma Criteria)</li> <li>○ Axial spine loading</li> <li>○ High-risk age group &lt; 5 and ≥ 65 years old</li> <li>○ Complaint of paralysis, numbness or tingling in extremities</li> </ul> </li> <li>• Maintain manual spinal stabilization, complete patient assessment.</li> </ul> <p style="text-align: center;"><b><u>SMR Indicated</u></b></p> <p>If the high risk trauma patient meets <u>ANY</u> of the following, apply SMR:</p> <ul style="list-style-type: none"> <li>• <u>Unreliable patient</u> <ul style="list-style-type: none"> <li>○ Uncooperative</li> <li>○ ALOC/abnormal GCS from baseline</li> <li>○ Inability to communicate because of alcohol/drugs/language barrier</li> <li>○ Distracting injury(s) precluding a reliable exam – including severe pain</li> </ul> </li> <li>• <u>Spinal pain, tenderness or deformity with palpation</u> <ul style="list-style-type: none"> <li>○ &lt; 65 years old with midline spine pain</li> <li>○ ≥ 65 years old with any spinal pain</li> <li>○ Anatomic deformity of the spine</li> </ul> </li> <li>• <u>Abnormal motor/sensory exam</u> <ul style="list-style-type: none"> <li>○ Inability to perform wrist/hand extension bilaterally</li> <li>○ Inability to perform foot plantarflexion and dorsiflexion bilaterally</li> <li>○ Abnormal sensation</li> <li>○ Pain/weakness/paresthesia with self-initiated movement (<b>FINAL EXAM STEP</b>)</li> </ul> </li> </ul> <p><b><u>NO FORM OF SMR REQUIRED</u></b></p> <ul style="list-style-type: none"> <li>• Patients that do not meet the above criteria</li> <li>• Patients with penetrating injury to the head, neck, or torso <u>unless</u> a neurologic deficit is present</li> </ul>	<ul style="list-style-type: none"> <li>• Universal Protocol #601</li> <li>• <b>Same as adult SMR evaluation requirements</b> <ul style="list-style-type: none"> <li>○ Take into consideration age appropriate response to examination</li> <li>○ May utilize car seat if available</li> <li>○ Pad shoulders and head for anatomic alignment as indicated</li> </ul> </li> </ul>

<b>BLS Optional Scope</b>
Pulse Oximetry – O <sub>2</sub> administration per Airway Management Protocol #602
<b>ALS Procedures</b>
Removal of the cervical collar/SMR after patient assessment
<b>Base Hospital Orders Only</b>
As needed
<b>Notes</b>
<ul style="list-style-type: none"> <li>• Spinal Motion Restriction (SMR) is the practice of maintaining the spine in anatomic alignment while minimizing gross movement and does not mandate the use of a backboard</li> <li>• Self-initiated movement of the patient-final exam step in which patient moves head left &amp; right, up &amp; down</li> <li>• Apply C-Collar and secure patient for transport to minimize flexion, extension, rotation, or torsion             <ul style="list-style-type: none"> <li>○ SMR patients with isolated thoracic/lumbar pain or deformity do NOT require a C-Collar</li> </ul> </li> <li>• Backboards may be useful for blunt trauma patients requiring extrication, when the patient must be moved multiple times, or as a splint in the patient with blunt trauma and multiple extremity fractures .</li> <li>• NONAMBULATORY Patients -Use backboard (or equivalent devices) to transfer the patient to gurney or the transport unit with minimal spinal movement, remove the device, and secure for transport.</li> <li>• Backboards can be left in place if removing interferes with critical treatments or interventions</li> <li>• AMBULATORY patients may be allowed to self-extricate</li> <li>• High risk population of &lt;5 and ≥ 65 yrs should be assessed for SMR even with low energy mechanism</li> <li>• Helmet removal may not be necessary with athletic injuries where shoulder pads are also worn (i.e. football, lacrosse, etc.), and airway management and spinal alignment can be maintained</li> <li>• BLS responders –when in doubt, maintain manual spinal stabilization until ALS personnel evaluate the patient</li> </ul>