Initiated: 7/1/14	MILWAUKEE COUNTY EMS	Approved: M. Riccardo Colella, DO, MPH, FACEP
Reviewed/revised: 10/1/15	PRACTICE GUIDELINE	
Revision: 1	SPINAL MOVEMENT PRECAUTIONS	Page 1 of 1

Definitions:

Spinal Movement Precautions (SMP): An effort to minimize unnecessary movement of the spine through a keen assessment, attention to maintaining a neutral, anatomic position of the spine and the use of adjuncts such as cervical collar, well-padded long backboard, scoop stretcher, or a flat ambulance stretcher (which essentially is a padded backboard); the goal of SMP is to minimize the risk of spinal cord injury (SCI) from an unstable fracture and reduce the need for and harm of using a backboard when possible.

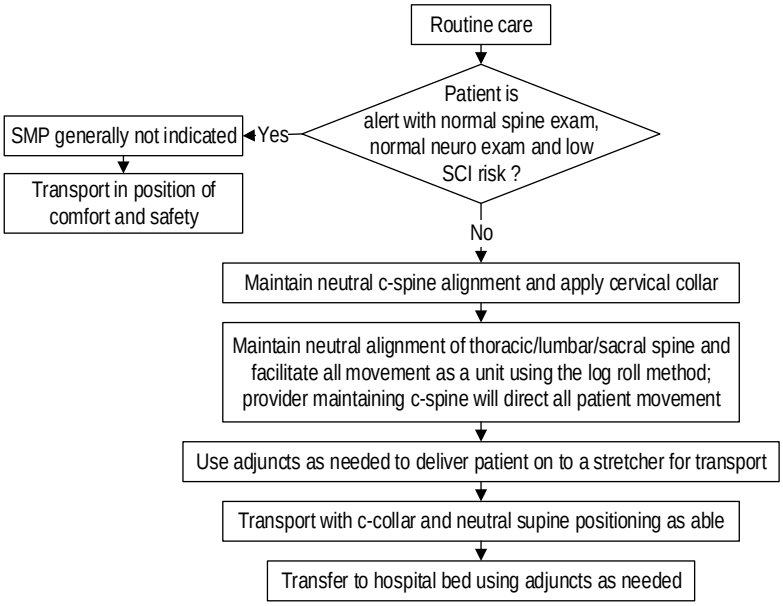
Alert patient: GCS 15, cooperative, clearly communicates, not distracted by pain, injury or circumstance and can focus on your instructions and exam; not intoxicated.

Normal spine exam: No midline bone pain or anatomic deformity ("step-off") and can subsequently passively rotate head 45 degrees to the left and right. An abnormal exam implies pain in the midline of the spine, palpable anatomic deformity of the spine, or an inability to passively rotate head 45 degrees to the left and right.

Normal Neurologic exam: Symmetrical hand squeeze, wrist extension, dorsiflexion, plantar flexion, gross sensation, NO numbness/weakness or priapism.

Low SCI Risk (Mechanism or Patient): EMS judgment of very low speed impact (e.g. minor MVC or ground level fall). Alert patients age 3 to 65 with no neurologic findings or no spine pain based on EMS judgment; ambulatory patients at scene; blunt trauma patients not meeting Level I or II trauma center evaluation criteria.

High SCI Risk (Mechanism or Patient): Blunt trauma meeting trauma transfer criteria for a Level I or II trauma center; penetrating trauma ONLY if an abnormal spine or neurologic exam AND transport not delayed by applying SMP (penetrating trauma to neck or torso alone does not make the patient high risk); age less than 3 or greater than 65 may be considered high risk when considering other major trauma factors.



NOTES:

- Do not strap or tape patient's head to the cot.
- It is mandatory to document the initial neurologic exam and upon each patient transfer (e.g. on to backboard/scoop/stretcher, prior to movement onto hospital bed and once transfer to hospital bed occurs). A simple one-line statement such as "patient's neurologic exam remained unchanged throughout all transfers" would suffice.
- Ideally, the backboard or scoop stretcher would be used as an adjunct if multiple extrication steps are needed in order to move a patient to a stretcher. Ambulatory patients or those patients with minor spine pain seated in a vehicle or at the scene may be gently assisted directly to an ambulance stretcher brought directly to them to minimize movement. EMS will make every effort to minimize movement to the spine in this process. A "short board" or K.E.D may be used as an extrication tool. It does not provide benefit and should not be used when implementing spinal movement precautions.
- Pediatrics age 3 to 8 that otherwise fit the low risk criteria may not require SMP based on the EMS provider's judgment.
- Hospital inter-facility transfers should not require a backboard although they will often require SMP; careful coordinated movement from hospital to ambulance stretcher using a scoop stretcher or slide board should suffice; ambulance stretcher straps should be secured.