



### Spinal motion restriction (SMR)

1. SMR is required in all patients with potential spinal injuries, with the exceptions as above (i.e. penetrating trauma)
2. Where possible, SMR should be maintained with a properly fitted C-collar and/or blanket-rolls (or a comparable commercial device) secured to the stretcher with tape when appropriate. If a c-collar would pull the patient out of neutral alignment then it should not be applied
3. Supine positioning is the preferred position for patients requiring SMR. However, if these patients cannot be transported supine, they should be maintained in a reasonable position of comfort with neutral alignment of the spine relative to the patient's underlying medical condition or their current presentation
4. SMR should not take priority over management of life-threatening co-morbidities such as airway management or hemorrhage control
5. Long boards can be used for extrication or as a means of moving an immobile patient to the stretcher but is not required to achieve SMR and is contraindicated in patients who have a long transport and/or wait times (greater than 30 minutes)
6. EMS practitioners may remove the patient from the long board and place them supine with a C-collar and head rolls/head blocks, onto an EMS stretcher (secured with stretcher seatbelts), as soon as deemed safe and practical to do so
7. In cases in which SMR is indicated as per protocol, patients with life-threatening respiratory compromise exacerbated by the supine position (i.e. head, facial/neck trauma, severe respiratory disease, body habitus), may be transported on the stretcher in semi-Fowlers or high Fowlers (maintaining SMR with a C-collar/head blocks and secured with stretcher seatbelts)
8. Patients with C-collars in place should not be transferred via wheelchair or walking
9. With regard to the pillow/padding of SMR patients, the priority is maintaining neutral alignment as near as possible. Continue with light padding or small pillows which do not alter the normal cervical alignment of patients as long as the SMR techniques still ensures appropriate control, immobilization and stabilization of the C-spine
10. Once again: C-collar application and SMR are contraindicated in all cases of isolated penetrating trauma. C-collar application and SMR are NEVER indicated in any isolated penetrating trauma. There is documented increased mortality due to the delay to definitive care with surgical interventions as a result of increased on scene time while applying C-collar and SMR. Of note, the long board can still be used to facilitate the extrication of the patient