7M SELECTIVE SPINAL PRECAUTIONS

PATIENT CARE GOALS

- Identify those patients who require spinal precautions[1] by utilizing a list of inclusion[2] and exclusion[3] criteria.
- Utilize accepted methods and tools to prevent further injury to the spine in injured patients during extrication and evacuation from the scene of injury to the EMS transport vehicle and during transport from the scene of injury to definitive care.

EMT

1. Assess and document Circulation, Motor, and Sensory (CMS) distally in all four extremities prior to and following any extrication or evacuation maneuver, including before and after application of any splinting or Spinal Precaution technique or device.
2. Utilize the Selective Spinal Precautions Algorithms to identify patients who ARE NOT in need of Spinal Precautions (algorithms at end of procedure).
3. Utilize the Selective Spinal Precautions Algorithms to identify patients who MAY benefit from Spinal Precautions during extrication/evacuation and transport. If they are indicated:
   a. Utilize manual stabilization of the cervical spine prior to application of mechanical stabilization devices or before performing any extrication maneuver.

      All patients with neurologic deficit, spinal column pain, barrier to assessment, or who are non-ambulatory:

      i. **Extrication/Evacuation** – Apply a cervical collar[4]. Utilize a long backboard, full body vacuum splint, or scoop stretcher to extricate the victim from the scene of injury and evacuate the victim to the EMS stretcher.
         - Avoid "log-rolling" the patient is possible. Instead, use the "lift and slide" technique.

      ii. **Transport (including interfacility transport)** – after placing the patient on the EMS stretcher:
         - Cervical collar[4] – leave cervical spinal precaution devices in place during transport.
         - Long backboard – while maintaining manual in-line stabilization, remove the patient from the long spine board unless removal will delay transport more than 10 minutes or if removal is unsafe due to the patient's size/weight. Use the multi-person lifting technique (instead of log-rolling).
         - Scoop stretcher – a properly padded scoop stretcher may be left in place for transporting the patient.
         - If patient condition requires a non-supine, non-flat position during transport to prevent or avoid airway or respiratory compromise, remove the patient from the rigid device and position the patient as necessary to maintain both stabilization of the spinal column and to protect the patient's airway and respiration.

   b. Ambulatory patient (patients who are ambulatory prior to EMS arrival or are capable of self-extricating from the scene of injury with minimal assistance):

      i. **Extrication/Evacuation** – apply cervical collar[4]. If possible, allow patient to self-extricate from the vehicle or scene of injury to the EMS stretcher with assistance.

- Place EMS stretcher as close to the patient as practical.
- DO NOT perform standing takedowns of patients onto backboards.
- DO NOT extricate these victims using a backboard or other rigid device unless necessary to assist with movement from the scene of injury to the EMS stretcher.

ii. **Transport** – Continue mechanical spinal precaution intervention using a cervical collar[4] and by securing the patient to the EMS stretcher with seatbelts or an appropriate pediatric securing device.

DOCUMENTATION KEY POINTS

- Inclusion and/or exclusion criteria justifying level of spinal precautions taken.
- CMS assessments before and after precautions taken.
- Techniques utilized, patient response and complications (if any) encountered.

NOTES

[1] The approach to the patient suspected of having a spinal injury is to provide spinal precautions that restrict the free and uncontrolled movement of the spinal column since complete immobilization is not possible and is potentially harmful.

[2] **Inclusion Criteria**

- Any patient with a traumatic injury from a suspicious mechanism of injury (see list below) that may have caused an injury to the spinal column as indicated by presence of:
  - New neurological deficit
  - Spinal column pain
  - Inability to ambulate due to a traumatic injury
  - Presence of a barrier to assessment (altered mental status, cognitive impairment, language barrier, or other causes resulting in an inability to communicate and participate in the assessment process)
- Suspicious Mechanisms of Injury for Spinal Column Injury:
  - High-risk auto crash
    - Intrusion (including roof) >12 inches on occupant side or >18 on any side
    - Ejection (partial or complete)
    - Death of a passenger in same vehicle
  - Car vs. pedestrian or bicyclist >20mph
  - Fall greater than 3x patient height
  - Axial loading injury (diving, sport-related injury)
  - Elderly patient (>75) with a fall from standing height and head trauma
  - EMS provider has high index of suspicion for dangerous mechanism of injury
- Patients with an acute and unstable spinal column injury that has been confirmed by medical imaging and who are undergoing inter-facility transport

[3] **Exclusion Criteria**

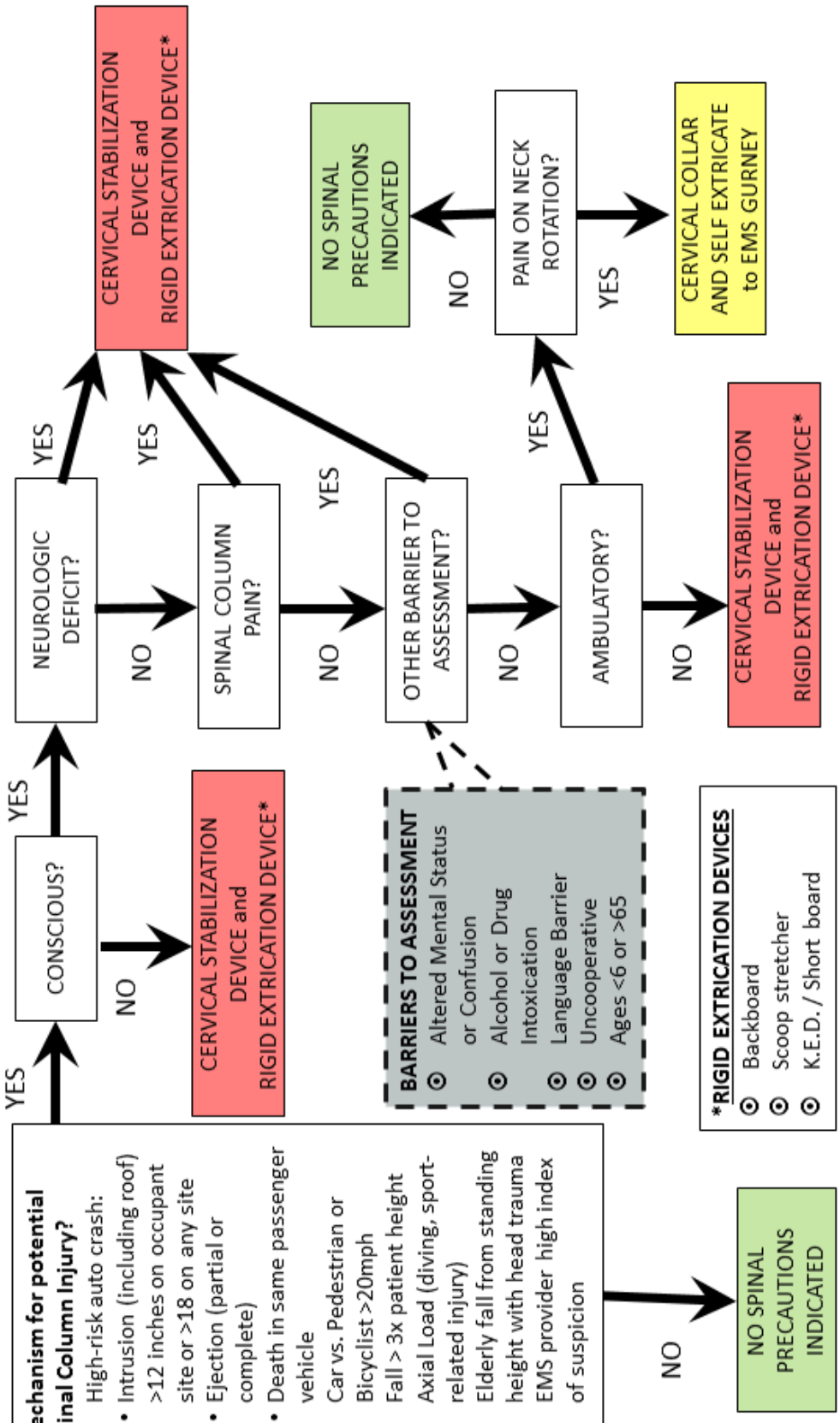
- Patients with traumatic injury without suspicious mechanism of injury or acute neurologic deficit, or spinal column pain, and in whom there is no barrier to assessment
- Patients with penetrating trauma **WITHOUT** neurological deficits.

[4] Cervical collars or stabilization devices may include any of the following: rolled towel, pillow, c-collar, K.E.D., head blocks, or any material necessary to fit the patient's size, stature, and condition.

Selective Spinal Precautions:

Stage 1: Extrication and Evacuation

PROVIDERS MAY OPT TO USE TOOLS AND TECHNIQUES THAT EXCEED THIS PROTOCOL BASED ON THEIR DISCRETION **ONLY** IF JUSTIFICATION IS DOCUMENTED IN THE PCR



Selective Spinal Precautions:

Stage 2: Transport

PROVIDERS MAY OPT TO USE TOOLS AND TECHNIQUES THAT EXCEED THIS PROTOCOL BASED ON THEIR DISCRETION **ONLY** IF JUSTIFICATION IS DOCUMENTED IN THE PCR