

Consensus statement addresses when to use spinal motion restriction in emergencies

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An updated AAP-endorsed consensus statement on when and how to use spinal motion restriction for trauma victims reflects guidance from three emergency medicine organizations, the first time the groups have developed a joint statement on the topic.

The consensus statement, which includes a section on treatment of children, is from the American College of Surgeons Committee on Trauma, the American College of Emergency Physicians and the National Association of EMS Physicians. Twelve groups also have endorsed it.

Spinal Motion Restriction in the Trauma Patient — A Joint Position Statement is published online in *Prehospital Emergency Care*, <https://www.tandfonline.com/doi/full/10.1080/10903127.2018.1481476>.

Spinal motion restriction is preferred over the term spinal immobilization because the goal is to *minimize* unwanted movement of a potentially injured spine, and current techniques don't provide true spinal immobilization.

The statement provides the following guidance regarding treatment of children:

- Don't rely on age alone when deciding whether to use spinal motion restriction in prehospital care.
- Apply a cervical collar if the patient has any of the following conditions:
 - neck pain;
 - torticollis;
 - neurologic deficit;
 - altered mental status (including Glasgow Coma Scale of less than 15, intoxication, and other signs such as agitation, apnea, hypopnea and somnolence); or
 - involvement in a high-risk motor vehicle or high-impact driving accident, or a substantial torso injury.
- Minimize the time on backboards. If the child will be on backboards for a prolonged period, consider using a vacuum mattress or padding as adjuncts to reduce the risk of pain or pressure ulcers.
- Use additional padding under the shoulders to avoid excessive cervical spine flexion with spinal motion restriction. This often is necessary because of the variation in the head size to body ratio in young children relative to adults.

Backboards traditionally have been used to help immobilize the spine after certain emergencies, but other devices can be used: a scoop stretcher, vacuum splint, ambulance cot or similar device to which a patient can be safely secured.

The consensus statement also states that there is no evidence supporting a high risk/incidence for noncontiguous multilevel spinal injury in children. The rate of contiguous multilevel injury in children is only 1%, and the noncontiguous injury rate is thought to be equally as low.

The updated guidance is aimed at emergency medical services (EMS) personnel, EMS medical directors, emergency physicians and trauma surgeons. Hospitals should be prepared and equipped to carefully remove patients as soon as possible after arrival.

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