

Pediatric Immobilization

Research of current literature does not offer any conclusive information regarding the conditions requiring the removal of a pediatric patient from a child safety seat involved in a motor vehicle crash for immobilization. In consultation with Dr. Pamela Ross, Pediatric Attending with the University of Virginia Medical Center, the following criteria has been developed:

In the event a pediatric patient secured in a child safety seat has been involved in a motor vehicle crash, the patient must be removed from the child safety seat for immobilization on a pediatric immobilization device under the following circumstances:

1. Integrity of the child seat has been violated (seat broken).
2. The patient exhibits a focal neurological deficit. Focal neurologic deficit refers to abnormality that results in a child not being able to function normally. It can include but is not limited to decreased function/movement of an extremity, eye deviation, and incontinence in a potty-trained child. I understand that a broken arm could present as a "focal deficit". If there is any question or mechanism for potential neurologic/spine injury - then caution should be toward protecting and immobilizing the spine. i.e. a child is ejected from a car seat 15 feet and has an obvious arm/leg deformity in which they are not able to move the extremity; EMS attributes the focal deficit to the fact that the extremity is broken, however, the mechanism provides potential for spinal cord injury - therefore, the child should be fully immobilized with appropriate pediatric spine stabilization equipment.

Note: Be reminded the smaller child's head is larger proportionately to the remaining torso and therefore requires additional padding to compensate for the space (void) difference to maintain neutrality of the cervical spine and maintain airway. Because the head is larger and is not "restrained" during a motor vehicle collision, it is important to review the mechanism of injury when deciding to utilize the child safety seat as an immobilization device.

Rolled towels can be utilized to immobilize the pediatric patient's within their child safety seat.