

- h. A communication barrier that prevents accurate assessment
  - i. *If none of the above apply*, patient may be managed without a cervical collar
2. Patients with penetrating injury to the neck should not be placed in a cervical collar or other spinal precautions regardless of whether they are exhibiting neurologic symptoms or not. Doing so can lead to delayed identification of injury or airway compromise and has been associated with increased mortality
3. If extrication is required:
  - a. **From a vehicle:** After placing a cervical collar, if indicated, children in a booster seat and adults should be allowed to self-extricate. For infants and toddlers already strapped in a car seat with a built-in harness, extricate the child while strapped in his/her car seat
  - b. **Other situations requiring extrication:** A, preferably padded, long board may be used for extrication, using the lift and slide (rather than a logroll) technique
4. Helmet removal
  - a. If a football helmet needs to be removed, it is recommended to remove the face mask followed by manual removal (rather than the use of automated devices) of the helmet while keeping the neck manually immobilized — occipital and shoulder padding should be applied, as needed, with the patient in a supine position to maintain neutral cervical spine positioning
  - b. Evidence is lacking to provide guidance about other types of helmet removal
5. Do not transport patients on rigid long boards unless the clinical situation warrants long board use. An example of this may be facilitation of immobilization of multiple extremity injuries or an unstable patient where removal of a board will delay transport and/or other treatment priorities. In these situations, long boards should ideally be padded or have a vacuum mattress applied to minimize secondary injury to the patient
6. Patients should be transported to the nearest appropriate facility, in accordance with the [American College of Surgeons Committee on Trauma \(ACS COT\) 2022 National Guideline for the Field Triage of Injured Patients](#)
7. Patients with severe kyphosis or ankylosing spondylitis may not tolerate a cervical collar. These patients should be immobilized in a position of comfort using towel rolls or sandbags

### **Patient Safety Considerations**

1. Be aware of potential airway compromise or aspiration in immobilized patient with nausea/vomiting or with facial/oral bleeding
2. Excessively tight immobilization straps can limit chest excursion and cause hypoventilation
3. Prolonged immobilization on spine board can lead to ischemic pressure injuries to skin
4. Prolonged immobilization on spine board can be very uncomfortable for patient
5. Children are abdominal breathers therefore immobilization straps should go across chest and pelvis and not across the abdomen
6. Children have disproportionately larger heads. When securing pediatric patients to a spine board, the board should have a recess for the head or the body should be elevated approximately 1–2 cm to accommodate the larger head size and avoid neck flexion when immobilized
7. In an uncooperative patient, avoid interventions that may promote increased spinal movement
8. The preferred position for all patients with spine management is flat and supine. There are three circumstances under which raising the head of the bed to 30 degrees may be considered: