## Preparation for Transport | Supine patients

- Secure to a long backboard or vacuum mattress.
- 14 points for skills validation.
- Assessment and Reassessment
- Understand the process
- Know your equipment



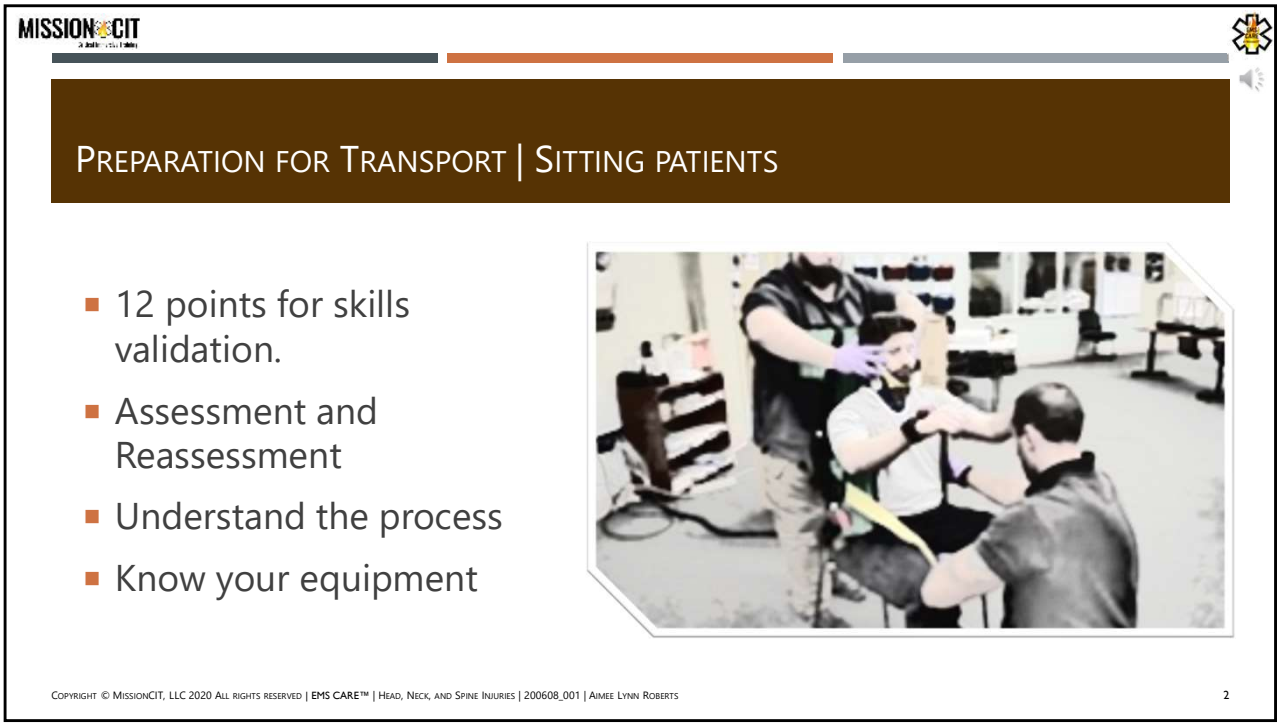
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Hello again. In part B of this lesson, we are going to discuss preparation for transport of Patients with Head Neck and Spine Injuries. We begin with Supine patients, followed by sitting and standing cases. We finish with some helpful tips on all three.

As prepping the supine patient should be familiar for an experienced EMT, let's focus on the criteria to validate your skills. There are 14 key points to be reviewed as follows:

1. Taking appropriate PPE precautions.
2. Placing the patient's head in the neutral, in-line position, or directing your assistant to do so.
3. Maintain manual stabilization of the head, or direct your assistant to do so.
4. Reassess motor, sensory and circulatory function in each extremity.
5. Apply an appropriately sized extrication collar.
6. Position the immobilization device appropriately.
7. Direct the movement of the patient onto the device without compromising the integrity of the spine.
8. Apply padding to the void between the torso and the device as necessary.
9. Immobilize the patient's torso to the device.
10. Evaluate and pad behind the patient's head as necessary.
11. Immobilize the patient's head to the device.
12. Secure the patient's legs to the device.
13. Secure the patient's arms to the device.
14. Reassess motor, sensory and circulatory function in each extremity.

So this all depends on patient assessment, process, and understanding the equipment available. Bottom line, know the process cold, and exactly how to use the equipment on your truck.




So let's start our discussion for spinal immobilization of seated patients with the skills that are required. We then look at the various techniques and equipment you may use.

There are 12 key tasks being validated as follows:

1. Taking or verbalizing appropriate PPE precautions.
2. Placing the patient's head in the neutral in-line position, or directing your assistant to do so.
3. Maintain manual stabilization of the head, or direct your assistant to do so.
4. Reassess motor, sensory and circulatory function in

each extremity.

5. Apply an appropriately sized extrication collar.
6. Position the immobilization device behind the patient.
7. Secure the device to the patient's torso.
8. Evaluate torso fixation, and adjust as necessary.
9. Evaluate and pad behind the patient's head as necessary.
10. Secure the patient's head to the device.
11. Verbalize moving, or move the patient to a long backboard.
12. Reassess motor, sensory and circulatory function in each extremity.

While there are fewer skills on the list, the complexity may be much greater for these patients, so pay close attention to the upcoming methods and options.

Again, it is imperative to properly assess the patient, know the process cold, and fully understand the equipment available to you.

## Preparation for Transport | Sitting patients

- High priority
  - Maintain manual stabilization while moving patient.
- Low priority
  - Use a short board or vest-immobilization device.
- Assessment before placing device



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Now let's examine High and Low Priority seated patients. High-priority seated patients may be extricated using a rapid extrication technique. Be sure to maintain manual stabilization while moving the patient.

A high priority condition for a seated patient may be characterized as:

- The vehicle or scene is unsafe.
- The patient cannot be properly assessed before being removed from the vehicle.
- The patient needs an immediate intervention that requires a supine position.

- The patient’s condition requires immediate transport to the hospital. Or,
- The patient blocks access to another seriously injured patient

Without the above conditions present, the patient may then be extricated with a short board or vest-style device.




With rapid extrication, the patient is moved to a backboard, usually before the application of other immobilization devices. The backboard may be partially or fully outside the vehicle. The EMT positions the board to receive the patient, by angling it to minimize secondary injury. Make sure to have enough hands to reduce risk and ensure safety.

And be sure to keep the head stabilized while moving the patient onto the backboard. And then reposition the patient to move away from the vehicle, to the ground, and ultimately to be able to properly apply the

immobilization straps, and cervical collar if indicated.

## Sitting patients | Low-Priority

- Assessment
- Injury to cervical and thoracic spine.
- Short board or Vest
- Then secure to the long board.



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Suspected Injury to the cervical or thoracic spine suggests the patient may then be extricated with a short board or vest-style device.  So, Without the high-priority conditions present, assessment of the back, shoulder blades, arms, and collarbones must be done before the extrication device is placed against the patient.

Once the short board or vest is secured, remove the patient and then secure to the long board.

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## SITTING PATIENTS | LOW PRIORITY EXTRICATIONS

- Injury to cervical and thoracic spine.
- Torso strap tension
- Padding
- Avoid pivot points
- Prevent hyperextension

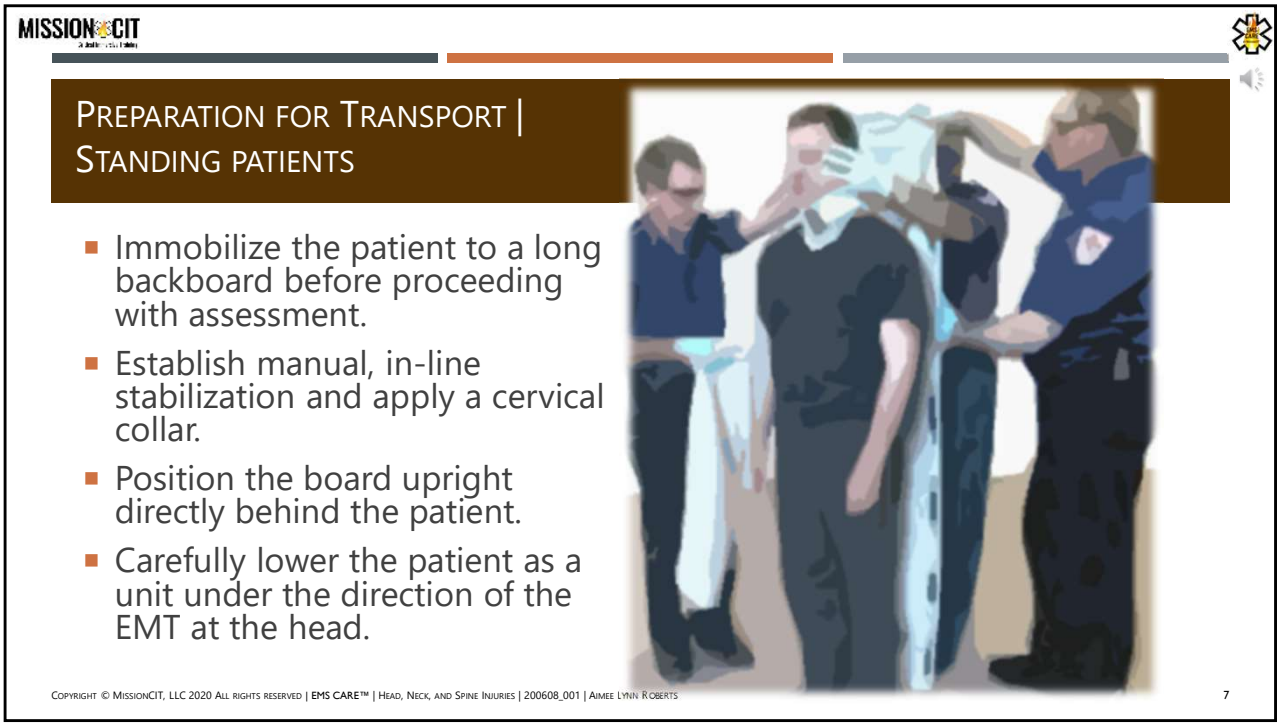


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Here are some points to consider for low priority extractions:

- Avoid applying the first torso strap too tightly.
- Do not pad between the collar and the board.
- Never use excessive padding behind the head.
- Be careful not to create a pivot point that may cause the cervical spine to hyperextend when the head is secured.
- Finally, Know your equipment - Follow the instructions provided by the manufacturer of the device you are using.



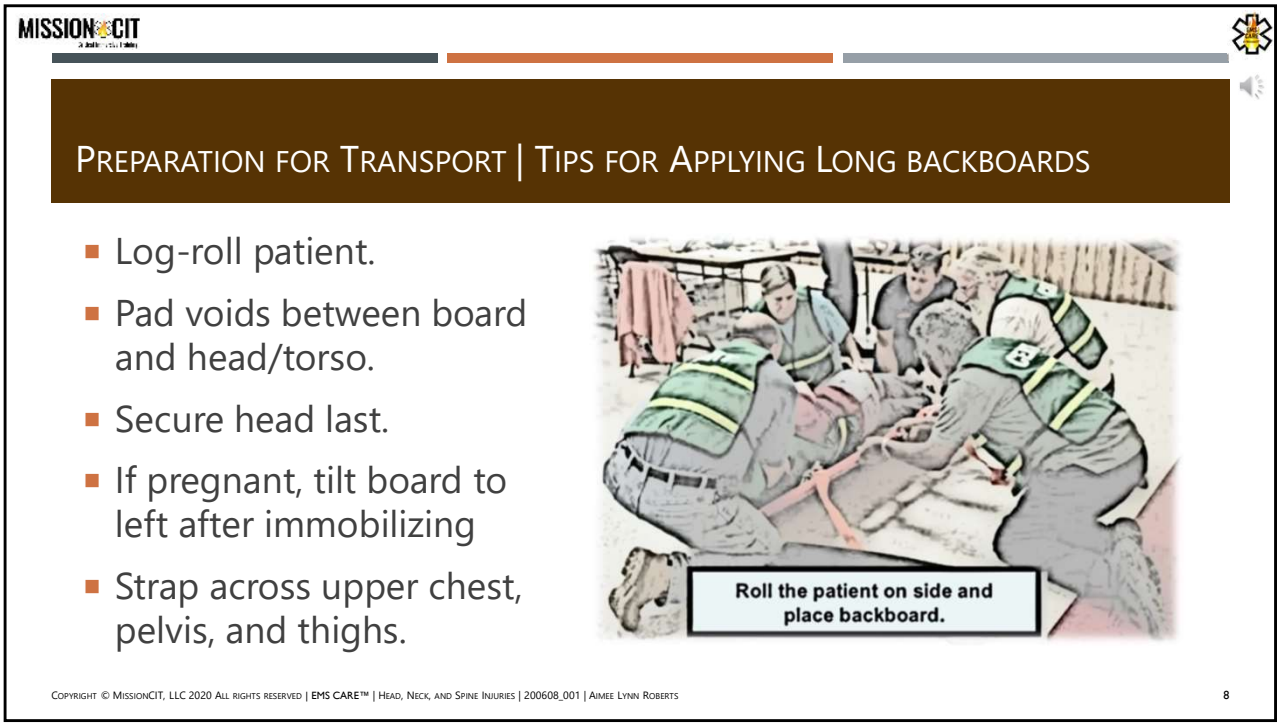

We now move on to standing patients. This process will require three EMTs.

First, Immobilize the patient to a long backboard before proceeding with assessment. Then,

1. Begin by establishing manual, in-line stabilization and applying a cervical collar.
2. Position the board upright directly behind the patient. The EMTs should be positioned with one on either side of the patient, and the third directly behind the patient, maintaining in-line stabilization.
3. The two EMTs at the patient's sides grasp the

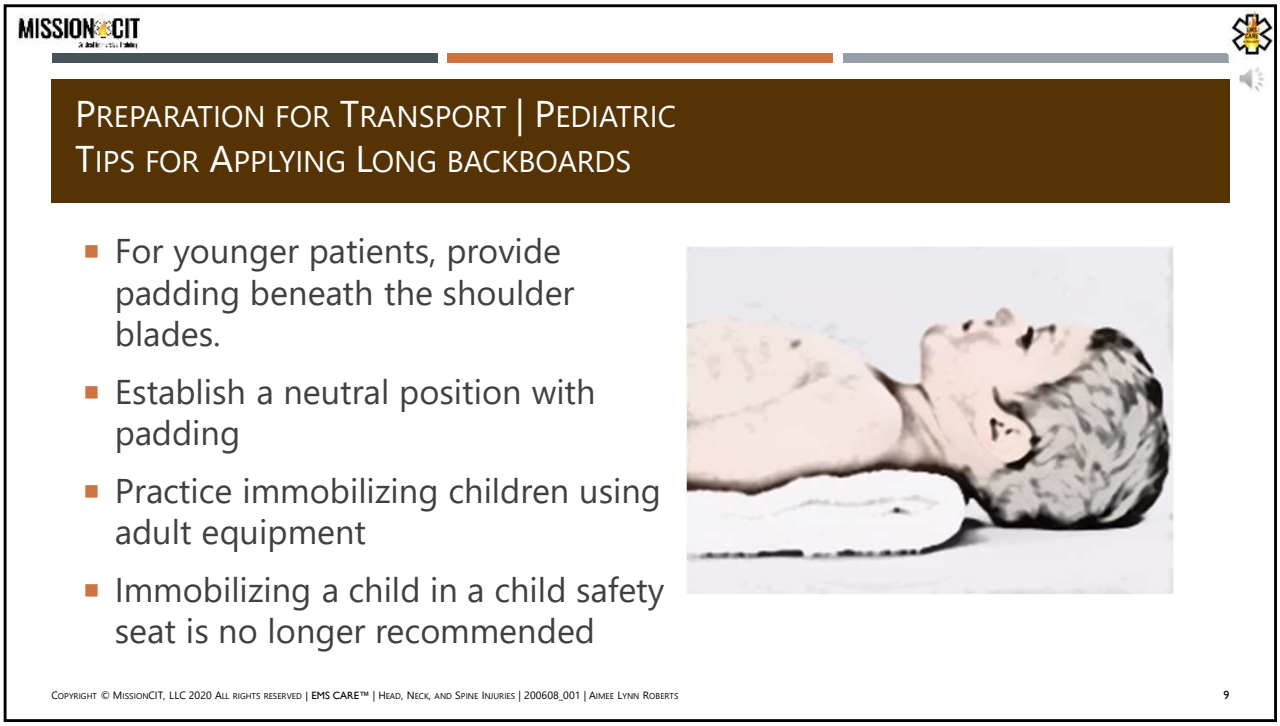
handholds at shoulder level or slightly above by reaching under the patient's arms, and carefully lower the patient as a unit.

4. The EMT at the head must ensure that the patient's head stays against the board and must carefully rotate his or her hands as the patient is being lowered to maintain in-line stabilization




Here are some tips for applying long backboards.

- When encountering a supine victim, consider log-rolling onto the board.
- Pad voids between the board and the head and torso.
- Secure the head last.
- If the patient is pregnant, tilt the board to the left, after immobilizing.
- Finally, Place the Straps across the upper chest, pelvis, and thighs.




And here are some tips for applying long backboards for pediatric patients:

- When immobilizing a six-year-old or younger child, provide padding beneath the shoulder blades to compensate for the child's large head.
- Pad from the shoulders to toes as needed to establish a neutral position.
- Practice immobilizing children using adult equipment and lots of padding.
- Immobilizing a child in a child safety seat is no longer recommended because the integrity of a safety seat

may have been compromised in the collision.

## Preparation for Transport | Tips for Sitting patients

- Cervical collar uppermost holes must be level with the patient's shoulders.
- The base of the short board should not extend past the coccyx.
- Do not use a chin cup or chin strap

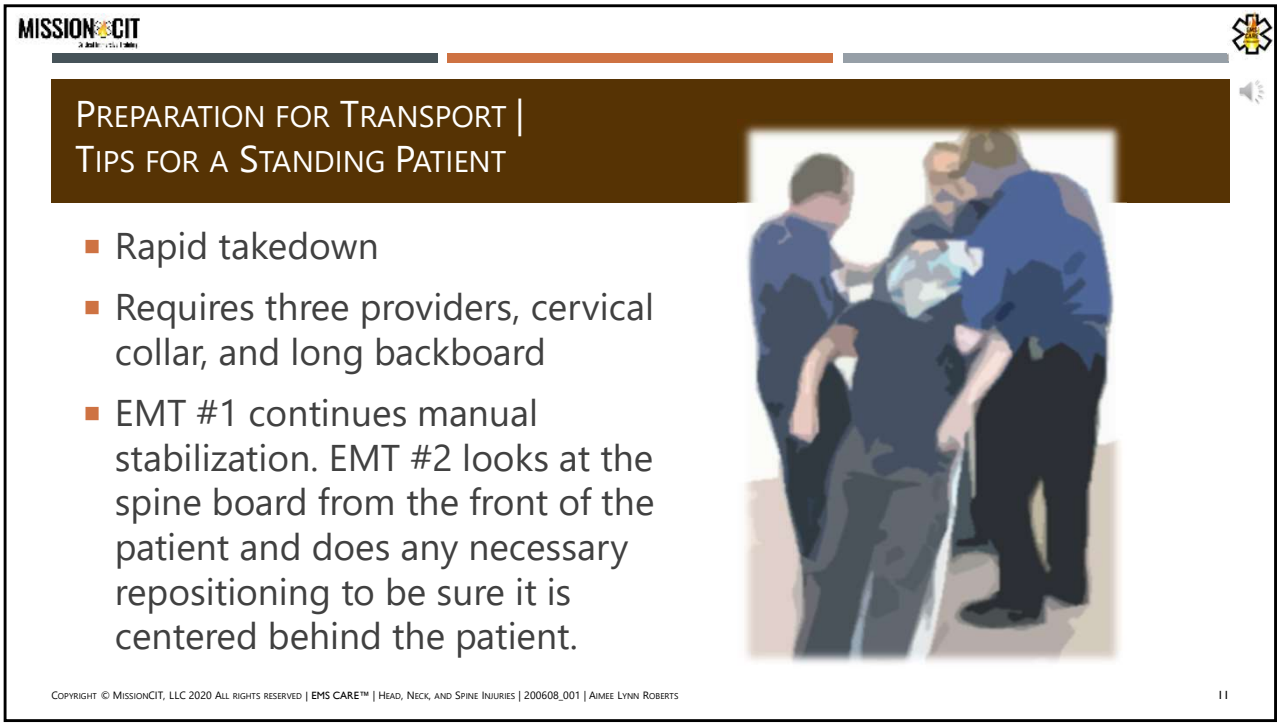


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For the seated patient, in order to provide full cervical support, the uppermost holes must be level with the patient's shoulders. And the base of the short board should not extend past the coccyx.

In addition, never place a chin cup or strap on the patient as it can prevent opening their mouth if there is a need to vomit.




For a standing patient, consider the use of a rapid takedown technique to transfer to a long backboard.

The process requires three providers, a cervical collar, and a long backboard. It works as follows:

- First, EMT #1 continues manual stabilization.
- EMT #2 and the third rescuer maintain their grasp on the spine board and patient.
- Then, EMT #1 explains to the patient what is going to happen, then gives the signal to begin slowly tilting the board and patient to the ground.
- As the board is lowered, EMT #1 walks backward and

crouches, keeping up with the board as it is lowered and allowing the patient's head to slowly move back to the neutral position against the board.

- Finally, EMT #1 must accomplish all this without interfering with the lowering of the board.

So this is the end of Part B of this lesson.

In part C we will discuss helmet removal.

Good Studying.