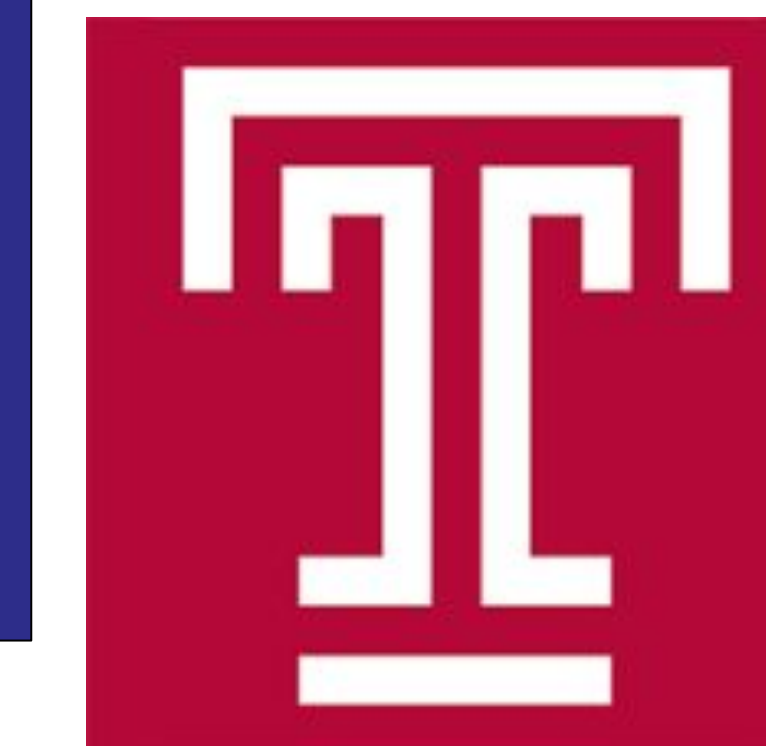




# “Hit The Road”: How to Improve Safety During Patient Transportation in the Radiology Workplace

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## BACKGROUND

The Radiology department is one of the places in the hospital where intrahospital transportation of patients most commonly occurs. During transportation, it is vital that all members work as a team and are well educated on how to ensure patient safety and not to cause additional injury to the patient. This project aims to educate the members involved in the patient transportation in the radiology department and to standardize the transportation process.

## METHODS

Transporting patients requires adequate knowledge, skills, communication among workers and use of appropriate equipment when necessary to prevent adverse events. Here we discuss the challenges and knowledge to provide safe transport.

## CONCLUSIONS

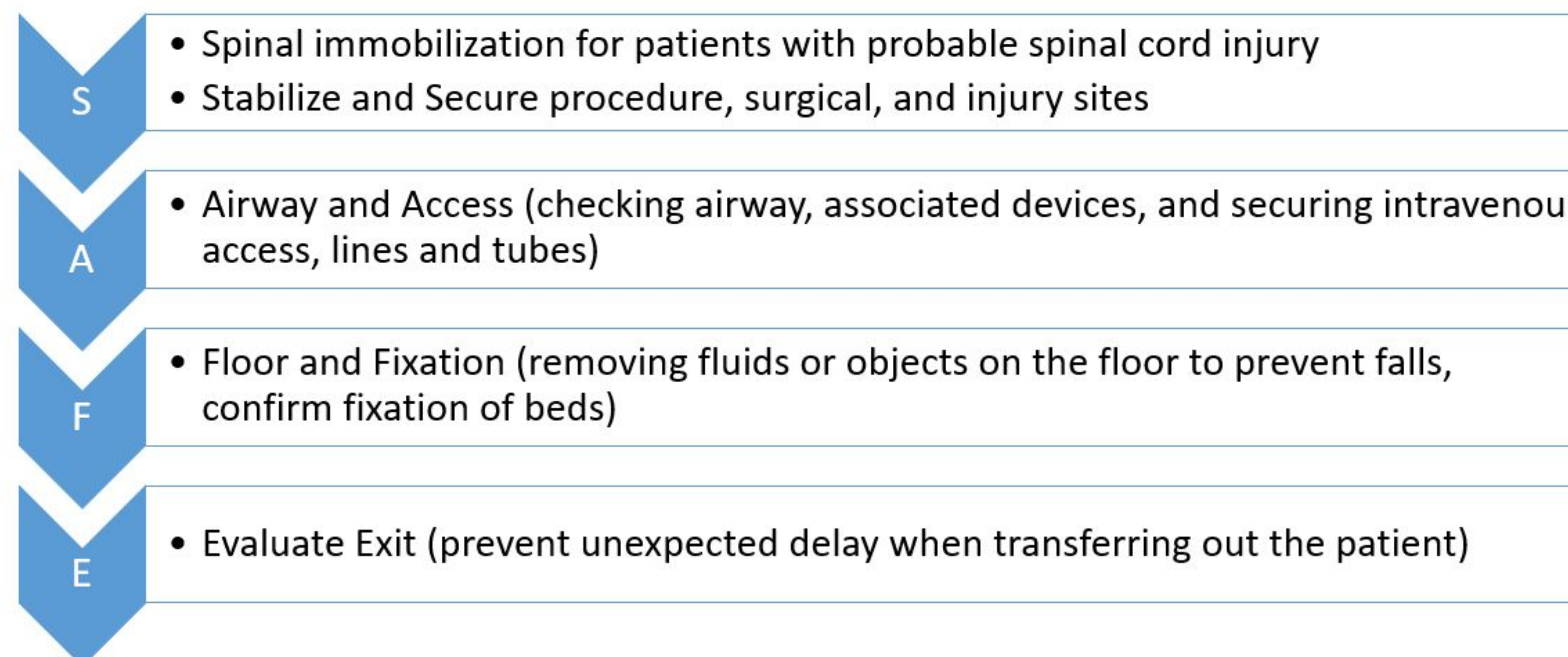
Educating radiology department staff annually for spinal immobilization techniques and implementing standardized checklist (SAFE) will enhance patient safety and efficiency during intrahospital transportation of patients in the radiology workplace.

## REFERENCES

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## RESULTS

### Checklist using the SAFE mnemonic



The radiology department should provide annual education to ensure that staffs are comfortable performing each of the following **spinal immobilization technique**.

### The Log-roll technique

#### Rescuer 1

- Positioned in front of the patient’s head.
- Role as a team leader and should give clear instructions about the movement of the patient.
- Restrict the motion of the head and the C-spine during the procedure.

#### Rescuer 2, Rescuer 3, and Rescuer 4

- Position themselves on one side of the hard board to turn the patient.
- Rescuer 2 stands at the level of the patient’s shoulders and upper chest and apply both arms across the patient, placing one hand at the level of the scapula, and the other on the hip.
- Rescuer 3 stands at the level of the patient’s hip and his hand at the level of the iliac crest while crossing hands with rescuer 2, placing the other hand underneath distal thigh.
- Rescuer 4 pushes the hard board underneath the patient.

### The 6-plus person lift technique

Used when the patients are heavy and a large number of qualified rescuers are available. The number of participants lifting the patient could be adjusted (up to 10) based on the patient weight and size.

#### Rescuer 1

- Positioned in front of the patient’s head.
- Role as a team leader and give clear instructions about the movement of the patient. “prepare to lift, lift”.
- Immobilizes the neck by placing both hands on the patient’s shoulders with the thumbs pointing away from the patient’s face.

#### Other six rescuers

- Position themselves along the patient’s sides: one on each side of the chest, pelvis, and legs. The hands are slid under the patient to provide a firm, coordinated lift.
- The rescuer 1 gives command, “prepare to lift, lift”.
- The patient needs to be lifted 10-15cm from the ground.
- The eighth rescuer could then slide the board into place from the foot end. After the board is in place, while positions are maintained, rescuer 1 gives the command “prepare to lower, lower” where the patient is lowered onto the spinal board.

### The Straddle lift-and-slide technique

#### Rescuer 1

- Positioned in front of the patient’s head.
- Role as a team leader and should give clear instructions about the movement of the patient.
- Maintain the head and neck in a neutral position using manual traction

#### Rescuer 2, Rescuer 3, Rescuer 4 and Rescuer 5

- Straddle the patient, and prepare the patient for lifting, at different levels: chest, pelvis, and lower extremities.
- Once the patient is lifted 10-20 cm off the ground, a rescuer 5 is responsible for sliding of the spinal hard board under the patient.
- The patient movement should be restricted by securing the straps on the spinal hard board.