SPINAL PRECAUTIONS: LIFTING OR REPOSITIONING TECHNIQUE

PURPOSE
Step by step instructions for each team member when lifting or repositioning patients with suspected or known spinal injury.

POLICY STATEMENTS
Repositioning or lifting a patient with a suspected or known spinal injury requires a team approach with clear roles and responsibilities of all team members and clear communication among team members to prevent further damage to spinal cord and promote patient comfort.

PRACTICE LEVEL/COMPETENCIES
Competencies: for being the team leader to lift or reposition a patient with a c-spine injury or to lift/reposition a patient with an L- or T-spine injury include the ability to:

- perform a motor and sensory neurological exam
- describe and demonstrate how to stabilize the cervical spine during repositioning of the patient with a known or suspected cervical spine injury
- describe and demonstrate how to log-roll, lift or reposition a patient with a known or suspected spinal injury
- instruct “team” members on correct technique for assisting with repositioning and log-rolling a patient with a known or suspected spinal injury

DEFINITIONS

Head Rolls: Rolled towels or blankets placed against either side of a patient’s head, used to maintain proper spinal alignment of the head and neck. Note: sand bags are not recommended for this purpose.

Proper Spinal Alignment: Patient’s head and neck are in neutral position: ie. no hyper flexion/extension or rotation, and the chin is in alignment with the sternal notch and umbilicus.

Traction: Method used to realign spinal bones using weights. Eg. Halo traction.

PROCEDURES
Cervical Spine (C-Spine) Injury, Lesion or Post C-spine Surgery

“Team Leader” Responsibilities
1. **DETERMINE** if you have the competencies to be the “team leader” to lift or reposition a patient with a cervical spine (c-spine) injury.
   
   **NOTE:** If unfamiliar with the technique, contact Emergency Department charge nurse for assistance.

2. **GATHER** equipment:
   a. Sliding sheet – with blue sliding surface
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b. Head Rolls

3. **OBTAIN** assistance of 2 to 5 staff members and **PROVIDE** instruction on lifting and repositioning techniques as needed
   a. A minimum of three staff members are required to reposition patients with c-spine injuries.
   b. Factors such as size of the patient, presence of additional injuries, patient’s predicted ability to tolerate repositioning, and the need to transfer influence number of staff required to assist.

4. **IDENTIFY** patient and **EXPLAIN** procedure.

5. **ENSURE** the bed is flat.

6. **POSITION** patient’s arms, or ask patient to cross their arms over their lower abdomen or pelvis to discourage any attempt by the patient to assist with the turn.
   
   **NOTE:** Crossing arms onto the chest/abdomen minimizes shoulder movement while allowing arms to be out of the way of the turn. Allowing patients to assist in turning may cause twisting of the spine, potentially increasing the damage caused by the injury.

7. **POSITION** any tubes and drains to ensure no unnecessary traction or compression occurs during turning/repositioning.

8. **ENSURE** splints/devices are in place to support any other injuries if present.

9. **ENSURE** patient is in **proper spinal alignment** prior to repositioning.

10. **PERFORM** a motor/sensory exam prior to repositioning to determine neurological status to provide “baseline” information.

11. **DIRECT** “lift team” members to their positions.

12. **ASSIGN** additional staff as required to move the lower limbs.
   
   **NOTE:** Legs **must** be moved in unison with the spine to maintain spinal alignment and to reduce patient discomfort.

13. **CONFIRM** with the “lift team” members that the lifting sheet extends from the patient’s shoulders to lower limbs.

   **NOTE:** The purpose of the lifting sheet is to firmly support the entire length of the spine.

14. **FIRMLY HOLD** the patient’s shoulders at the mid-clavicular area with forearms held tightly to the patient’s head and neck to form a rigid cradle.

15. **INSTRUCT** one of the “lift team” members to remove head rolls once you have firm control of the head - **never** remove stabilizing aids until the head is controlled.

16. **ENSURE** patient’s arms are relaxed on abdomen.

17. **CALL** the lift on a 1-2-3 count.

18. **ENSURE** alignment is maintained throughout the lift.

19. **VERIFY** that the patient is in **proper spinal alignment**.
20. **PERFORM** a motor and sensory status assessment immediately following repositioning to determine if any change has occurred during the procedure.

21. **RELEASE** head if post procedure motor and sensory status is satisfactory and replace stabilizing aids.

22. **ELICIT** feedback from the patient regarding their comfort and sense of alignment.

23. **ENSURE** all tubes, lines or leads are positioned correctly.

   **NOTE:** If patient is connected to spinal traction, refer to Halo traction reference care plan.

24. **DOCUMENT** on appropriate record(s):
   a. Date, time
   b. Repositioning/lift performed
   c. Spine immobilized (c-spine)
   d. Number of assistants present
   e. Patient’s before and after motor and sensory assessment
   f. How the patient tolerated the procedure
   g. Analgesia/antiemetics administered
   h. Patient/family education, if appropriate

**“Lift Team” Member Responsibilities**

1. **POSITION** yourselves on either side of patient between shoulder and hip level.

2. **ROLL** edges of the lifting/sliding sheet inward and **GRASP** next to the patient’s body with one hand at shoulder level and one hand at hip level.

   **NOTE:** Holding the lifting sheet close to the patient increases stability during lifting. Lifting with palms facing up is a stronger position for the ‘lifting team’ members.

3. Staff member assigned to move the lower limbs should **SLIDE** his/her arms under the patient’s thighs and calves.

4. **COLLABORATE** with the “team leader” as he/she directs the “lift team” members on the count of 1-2-3 to **LIFT** and **MOVE** the patient.

   **NOTE:** maximum coordination in this way is imperative to ensure maintenance of proper spinal alignment when the patient is moved.

5. **LIFT** patient only enough to marginally clear the mattress and move to desired location on the bed.

   **NOTE:** Marginal clearance prevents both shearing friction on the skin and loss of spinal alignment during the lift.

**L-Spine/T-Spine Injury, Lesion or Post Spinal Surgery**

1. **DETERMINE** if you have the **competencies** to lift or reposition a patient with a t-spine or l-spine injury.

2. **GATHER** equipment:
   - Sliding sheet – with blue sliding surface

3. **OBTAIN** assistance of one or two additional staff members.

   **NOTE:** Factors such as size of the patient, presence of additional injuries, patient’s predicted ability to tolerate repositioning, and the need to transfer influence whether you can perform a 2-person or 3 person lift.

4. **IDENTIFY** patient and **EXPLAIN** procedure.

5. **ENSURE** the bed is flat.
6. **POSITION** patient’s arms, or ask patient to cross their arms over their lower abdomen or pelvis to discourage any attempt by the patient to assist with the turn.  
   **NOTE:** Crossing arms onto the lower abdomen or pelvis minimizes shoulder movement while allowing arms to be out of the way of the turn. Allowing patients to assist in turning may cause twisting of the spine, potentially increasing the damage caused by the injury.

7. **POSITION** any tubes and drains to ensure no unnecessary traction or compression occurs during turning/repositioning.

8. **ENSURE** splints/devices are in place to support any other injuries if present.

9. **ENSURE** patient is in proper spinal alignment prior to commencing the turn.

10. **PERFORM** a motor/sensory assessment prior to repositioning to determine neurological status to provide “baseline” information.

11. **POSITION** one staff member on each side of the bed between shoulder and hip levels. **ASSIGN** the third staff member to move lower limbs as needed.

12. **CONFIRM** that the lifting sheet extends from the patient’s shoulders to buttocks.  
   **NOTE:** The purpose of the lifting sheet is to firmly support the entire length of the spine.

13. **ROLL** edges of the lifting/sliding sheet inward and **GRASP** next to the patient’s body with one hand at shoulder level and one hand at hip level.  
   **NOTE:** Holding the lifting sheet close to the patient increases stability during lifting. Lifting with palms facing up is a stronger position for the ‘lift team’ members.

14. Staff member assigned to move the lower limbs should **SLIDE** his/her arms under the patient’s thighs and calves.

15. “Team leader” to **CALL** the lift on a 1-2-3 count and in unison, **LIFT** and **MOVE** patient.  
   **NOTE:** maximum coordination in this way is imperative to ensure maintenance of proper spinal alignment when the patient is moved.

16. **LIFT** patient only enough to marginally clear the mattress and move to desired location on the bed.  
   **NOTE:** Marginal clearance prevents both shearing friction on the skin and loss of spinal alignment during the lift.

17. **ENSURE** alignment is maintained throughout the lift.

18. **PERFORM** a motor/sensory assessment immediately following repositioning to determine if any change has occurred during the procedure.

19. **ELICIT** feedback from the patient regarding their comfort and sense of alignment.

20. **ENSURE** all tubes, lines or leads are positioned correctly.  
   **NOTE:** If patient is connected to spinal traction, refer to Halo traction reference care plan.

21. **DOCUMENT** on appropriate record(s):
   a. Date, time
   b. Repositioning/lift performed (2 or 3 person lift)
   c. Spine immobilized (t-spine or l-spine)
   d. Patient’s before and after motor/sensory assessment
   e. How the patient tolerated the procedure
   f. Analgesia/antiemetics administered
   g. Patient/family education, if appropriate
REFERENCES


