

**NORTHSTAR SKI PATROL  
OEC 1999**

**Skills Performance Checklists**

**Spine Immobilization - Leadership**

**Objective: To develop an efficient, workable plan that recognizes the priority tasks in treating a backboard patient, and provides for a rational, systematic approach in assigning task responsibilities among the rescuers.**

Leadership Roles: There are two distinct leadership roles in managing any back boarding problem: (i) the site leadership role; and (ii) the patient handling leadership role.

Site leadership: The site leader is responsible for the overall handling of the problem from the initial contact with the patient until the patient is handed off to the helicopter or ambulance crew. The site leader makes the decisions about patient evaluation and treatment, necessary equipment and supporting personnel, and patient evacuation and transportation to medical facilities. Ordinarily, the site leader is responsible for radio contact with dispatch.

Patient handling leadership: The patient leader is stationed at the patient's head, providing manual C-spine immobilization until the patient is fully secured to the backboard. Because of the patient leader's vantage point, he/she is responsible for coordinating and directing all efforts involving manipulation of the patient: coordination of all log rolling efforts; coordination of the helpers' activities in applying O<sub>2</sub> and the C-collar, or in tying down the cravats or straps on the patient; coordination of all efforts involving lifting or moving the patient. Because manual C-spine immobilization must be applied continuously until the patient is fully secured to the backboard, the patient leader is stuck at the head throughout the majority of the problem, and his/her hands are not free for other tasks, such as keying the radio, adjusting the C-collar, clearing an airway, or demonstrating a preferable tie-down technique with a cravat or strap.

The first rescuer on the scene initially fills both leadership roles: site leadership as well as patient handling leadership. As trained help arrives, however, it makes sense to split the leadership roles, with a trained helper taking over patient leadership responsibilities, while the first rescuer concentrates on the decisions and actions related to the site leadership role. If resources are scarce, however, the first rescuer may find himself/herself in the unenviable and partially disabling position of having to continue to fill the two leadership roles simultaneously.

The following grid identifies and follows the patient leadership role, realizing that this role may be filled by one of the first trained helpers who arrives on the scene as backup to the site leader. The site leader role is not reflected on the following grid, but if helpers are scarce, the site leader will be carrying out tasks assigned to Helper B or Helper C. The grid assumes four rescuers are working the problem. That number is ideal, and should be sufficient to handle all back boarding incidents except those presenting difficult extrication challenges.

**Patient/Site Leader** is on-scene with patient:

- a. Completes urgent survey.
- b. Calls for equipment and assistance.
- c. Immobilizes head and neck as C-spine precaution.

**Assistance Arrives On-Scene**

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<b>Events</b>	<b>Patient Leader</b>	<b>Helper A</b> [Helper Airway]	<b>Helper B</b> [Helper Backboard]	<b>Helper C</b> [Helper C-Collar]
<b>Assistance arrives.</b>	<p>Immobilizes head and neck.</p> <p>Coordinates and directs all tasks involving patient manipulation: i.e.; application of O<sub>2</sub> mask and C-collar.</p> <p>Directs all helpers that if patient vomits, patient will be log rolled toward Helper A, with Patient Leader coordinating the effort.</p>	<p>Brings O<sub>2</sub> to patient. <i>Preferred side for Helper A is patient's left because if airway needs to be cleared by log rolling, it's better to roll onto left side. Helper A will be responsible for applying necessary suction during log roll.</i></p> <p>Sets up system for delivery.</p> <p>Applies mask to patient and sets proper O<sub>2</sub> flow.</p> <p>Works with Helper C to apply C-collar.</p>	<p>Prepares backboard.</p> <p>Determines "head" of board and tapes padding in place.</p> <p>Assembles straps and necessary cravats. <i>Need 10-12 cravats if straps not used.</i></p> <p>Obtains blanket and folds it lengthwise into 12" - 15" strip for padding and stabilizing patient's head.</p> <p>Obtains padding for lumbar region of back and beneath and between knees.</p> <p>Positions all equipment near patient on side opposite from Helper A and O<sub>2</sub>. <i>Generally on patient's right side.</i></p>	<p>Measures patient for C-collar size.</p> <p>Obtains proper C-collar and brings to patient.</p> <p>When O<sub>2</sub> mask is in place, works with Helper A to apply C-collar.</p> <p>Examines spacing between back of patient's head and surface plane when neck and head are in neutral in-line position (eyes straight ahead) and assesses whether Helper B's blanket strip will provide sufficient padding to prevent excessive neck extension or flexion when backboard is in place.</p>
<b>O<sub>2</sub> mask and C-collar in place.</b>	<p>Immobilizes head and neck.</p> <p>Coordinates and directs all tasks involving patient manipulation: i.e.; tying cravats and applying straps to patient's body.</p>	<p>Obtains suction equipment and brings it to patient.</p>	<p>Helper B or Helper C (depending on who is first available) obtains a cravat and ties patient's feet together, and then assesses motion and sensation in patient's 4 extremities. Other Helper "sizes up" patient relative to backboard hand-hold locations, and positions straps (or ties off one end of the necessary cravats) for the shoulder/thoracic area tie-downs, and the pelvic area tie-downs.</p>	

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<p><b>Ready to log roll patient onto backboard.</b></p> <p><b>Need to recruit bystander or additional trained helper to assist in log roll at patient's lower trunk and legs.</b></p>	<p>Immobilizes head and neck.</p> <p>Coordinates and directs all tasks involving patient manipulation: i.e.; log rolling patient.</p>	<p>Assists in log roll; responsible for patient's upper trunk.</p> <p>Continues to monitor patient's airway, breathing, circulation and vomit impulses.</p> <p>Prepared to clear airway and perform suction if patient vomits.</p> <p>Every 5 minutes takes and records vital signs. Affixes strip of medical tape to patient's body in prominent location. Vitals recorded on tape.</p> <p>Monitors O<sub>2</sub> level in tank. Prepared to call for replacement tank when needed.</p>	<p>Responsible for placing backboard as patient is log rolled.</p> <p>Positions backboard correctly against patient's back, confirming proper longitudinal placement.</p> <p>Considers placing board 12" high if longitudinal drag will be necessary to "center" patient.</p> <p>During log roll, observes and palpates patient's spine if Patient Leader was unable to complete this survey.</p> <p>Inserts padding behind patient's lumbar spine as patient is rolled back onto board.</p>	<p>Responsible for patient's mid-section, overlapping with Helper A at upper trunk, and overlapping with bystander helper at patient's lower back and pelvic area.</p>

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<b>Reposition patient on backboard.</b>	<p>Immobilizes head and neck.</p> <p>Coordinates and directs all tasks involving patient manipulation: i.e.; repositioning patient. Longitudinal drag toward head to accomplish "centering."</p>	<p>Assists in repositioning.</p> <p>Longitudinal drag toward head. Place hands on solid (skeletal) area; don't drag flab or stretch clothing.</p>	<p>Assists in repositioning.</p> <p>Longitudinal drag toward head. Place hands on solid (skeletal) area; don't drag flab or stretch clothing.</p>	<p>Assists in repositioning.</p> <p>Places blanket strip (and other padding as needed) beneath patient's head (or, perhaps, shoulders as in the case of a child with a disproportionately large head) to prevent excessive neck extension or flexion.</p>
<b>Apply cravats and straps to secure patient to backboard.</b>	<p>Immobilizes head and neck.</p> <p>Coordinates and directs all tasks involving patient manipulation: i.e.; tying of cravats and straps to patient, starting at shoulders and working toward the feet. Especially need to ensure that Helper B and Helper C are working together down the patient's trunk, synchronizing their tightening efforts to avoid twisting the patient's body out of straight alignment.</p>	<p>Continues to monitor patient's airway, breathing, circulation and vomit impulses.</p> <p>Prepared to clear airway and perform suction if patient vomits.</p> <p>Every 5 minutes takes and records vital signs (written on medical tape).</p> <p>Continues to monitor O<sub>2</sub> level in tank.</p>	<p>Helper B and Helper C, working together, apply cravats and straps to patient's body, starting at shoulders and working toward the feet. Helpers B and C are especially diligent in synchronizing their tightening efforts to avoid twisting the patient's body out of straight alignment.</p> <p>If cravats or straps are trapped beneath the backboard, Helper B or C moves to foot of board, notifies others of intended action, then lifts foot of board 8" - 12" while others retrieve and free the trapped cravats and straps.</p>	

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<p><b>Apply blanket roll or head blocks to secure patient's head and fasten with straps or tape.</b></p>	<p>Immobilizes head and neck until blanket roll or head blocks are secured in place.</p>	<p>Continues to monitor patient's airway, breathing, circulation and vomit impulses.</p> <p>Prepared to clear airway and perform suction if patient vomits.</p> <p>Assists Helpers B and C by placing patrol belt, quick splint, etc., under head of board to raise it slightly to facilitate taping.</p>	<p>Helper B and Helper C, working together, lift head of board so that patrol belt, quick splint, etc., can be placed under it to keep is raised slightly during taping. Helpers B and C then apply blanket roll or head blocks, and fasten these stabilization devices with straps or tape to patient's head and backboard.</p>	
<p><b>Load patient into sled or onto litter.</b></p>	<p>Coordinates and directs all tasks involving patient manipulation: i.e.; lift of backboard and movement to sled or litter.</p> <p>Conducts (or reminds a Helper to conduct) repeat assessment of motion and sensation in patient's 4 extremities.</p> <p>Assists in patient lift and movement to sled or litter.</p>	<p>Positions O<sub>2</sub> tank and regulator on backboard between patient's legs and secures for transport.</p> <p>Assists in patient lift and movement to sled or litter.</p> <p>Continues to monitor patient's airway, breathing, circulation and vomit impulses.</p> <p>Prepared to clear airway and perform suction if patient vomits.</p> <p>Continues to monitor O<sub>2</sub> level in tank.</p>	<p>Finishes sled preparation. Assists in patient lift and movement to sled or litter.</p>	<p>Finishes sled preparation. Assists in patient lift and movement to sled or litter.</p>