



# CHAPTER 21

## SKILL GUIDES

### Outdoor Emergency Care: A Patroller's Guide to Medical Care, Sixth Edition

Edward C. McNamara, BS, NRP, David H. Johe, MD and Deborah A. Endly, BA, DH, NREMT

## Skill Guide 21-1

Date: \_\_\_\_\_

(CPI) = Critical Performance Indicator

Candidate: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

### Performing Neutral Head Alignment

Objective: To demonstrate the ability to perform neutral head alignment.			
Skill	Max Points	Skill Demo	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	-	-	
Kneel next to the patient's head, either to the side or at the top of the head. Place your hands on either side of the patient's head, with the palms adjacent to the ears and the fingers supporting the jaw and the back of the head.	1		
Gently move the head so that the patient's eyes are looking forward and the patient's nose and chin are aligned with the sternum. Never force the head into alignment. If the patient has muscle spasms in the neck or if your movement causes increased pain in the neck or numbness, tingling, or weakness in the extremities; or if alignment compromises airway or breathing, stop what you are doing and stabilize the patient in the position found. Continue to manually support the head while your partner applies a cervical collar around the neck. If the head cannot be moved into alignment, you may have to stabilize the head using a blanket roll. Do not allow the patient to move.	1		
Must receive 2 out of 2 points.			

Comments: \_\_\_\_\_

Failure of any of the CPIs is an automatic failure.

Evaluator: \_\_\_\_\_ NSP ID: \_\_\_\_\_

PASS      FAIL

# Skill Guide 21-2

Date: \_\_\_\_\_

(CPI) = Critical Performance Indicator

Candidate: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

## Sizing and Applying a Cervical Collar

Objective: To demonstrate ability to size and apply a cervical collar.			
Skill	Max Points	Skill Demo	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	-	-	
Maintain or establish manual stabilization of the head and cervical spine.	1		
Measure the patient and the cervical collar. Be sure to follow the manufacturer's specifications for sizing for each of the different collar types.	1		
Apply the cervical collar. <ul style="list-style-type: none"> <li>• Open the patient's coat or shirt.</li> <li>• Move any bulky clothing out of the way. Do not put the collar on over clothing.</li> <li>• Slide the posterior neck portion of the collar behind the patient's neck.</li> <li>• Swing the chin portion of the collar up over the patient's chest until it cups the chin.</li> <li>• Secure the cervical collar using the Velcro closure and ensure a proper fit.</li> </ul>	1		
Must receive 2 out of 3 points.			

Comments: \_\_\_\_\_

Failure of any of the CPIs is an automatic failure.

Evaluator: \_\_\_\_\_ NSP ID: \_\_\_\_\_

PASS      FAIL

# Skill Guide 21-3

Date: \_\_\_\_\_

(CPI) = Critical Performance Indicator

Candidate: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

## Performing the Axial Drag

Objective: To demonstrate the ability to perform the axial drag.			
Skill	Max Points	Skill Demo	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	-	-	
Rescuer 1 instructs Rescuers 2, 3, and 4 to slide the patient toward the foot of the backboard (toward the rescuers) on the count of three. Rescuers' hands should be at the hip area pulling the patient down to the foot of the board.	1		
Rescuer 1 instructs rescuers to slide the patient into the proper position on the count of three. Pull the patient up toward the head of the long backboard with rescuers' hands under the armpits on each side and moving simultaneously.	1		
Repeat Step 2 until the patient is positioned on the board correctly.	1		
Must receive 2 out of 3 points.			

Comments: \_\_\_\_\_

Failure of any of the CPIs is an automatic failure.

Evaluator: \_\_\_\_\_ NSP ID: \_\_\_\_\_

PASS      FAIL

# Skill Guide 21-4

Date: \_\_\_\_\_

(CPI) = Critical Performance Indicator

Candidate: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

## Securing the Patient onto a Long Backboard

Objective: To demonstrate ability to secure a sitting patient to a short board.			
Skill	Max Points	Skill Demo	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	-	-	
Secure the torso first. Cross the straps from over the shoulder to just above the opposite hip and tighten smoothly as the patient takes a deep breath. Do not tug or overtighten. (An appropriately tight strap should allow you to fit one finger between the strap and the patient and should never compromise the patient's ability to breathe.) If you are using a commercial device, follow the manufacturer's directions. Pad any voids using towels, blankets, or clothing to prevent movement or twisting of the spine and to improve the patient's comfort. There is usually a void under the knees that needs padding.	1		
Secure the pelvis and the extremities next. Beginning where the torso straps end to prevent gaps, cross the pelvis straps from above the iliac crests (the patient's hips) to just below the level of the greater trochanter of each femur (the upper thigh). This ensures that the entire weight of the pelvis is contained within the straps and is properly immobilized. (Alternatively, a single strap can be placed across the pelvis at the level of the pubis bone.) An additional strap should be placed across the mid-thighs between the end of the pelvis straps and the knees. Place another strap across the lower legs. If the patient has a possible pelvis or hip fracture or an abdominal injury, you may need to place the straps just above or below the injury, but never place them tightly across the abdomen.	1		
Secure the head last. If you are using a commercial head immobilization device (head blocks), follow the manufacturer's directions. If you are using towels rolls: <ul style="list-style-type: none"> <li>• Roll two standard towels and securely tape each roll.</li> <li>• Place one towel on each side of the patient's head.</li> <li>• Secure the head by placing a large piece of tape or a cravat over the patient's forehead. Be sure not to cover the eyelids. Place a second piece of tape over the C-collar just below the chin.</li> </ul> <p>An alternative method is to place a rolled-up (horse-collar shaped) blanket around the patient's head and secure it at the chin and forehead.</p> <p>If you have determined that the helmet should remain on the patient, use commercial head blocks or towels, and strap the helmet to the board.</p>	1		

Reassess the patient's airway and breathing. Also reassess distal circulation, sensation, and movement in each extremity. Document these CMS findings on the PCR. Monitor the patient throughout transport. Given that vomiting is common with TBI, have suction available and be prepared to roll patients who have undergone spinal motion restriction onto their sides while they remain strapped to the board.	1		
Must receive 3 out of 4 points.			

Comments: \_\_\_\_\_

Failure of any of the CPIs is an automatic failure.

Evaluator: \_\_\_\_\_ NSP ID: \_\_\_\_\_

PASS    FAIL

# Skill Guide 21-5

Date: \_\_\_\_\_

(CPI) = Critical Performance Indicator

Candidate: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

## Placing a Patient on a Full-Body Vacuum Mattress

Objective: To demonstrate how to place a patient on a full-body vacuum mattress.			
Skill	Max Points	Skill Demo	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	-	-	
Place the mattress on a flat surface near the patient, with the head end of the mattress at the patient's head.	1		
Allow air to enter the mattress. Keep the valve stem open until the mattress is soft and pliable.	1		
Smooth the mattress so it is flat and level.	1		
Connect the pump to the mattress.	1		
Determine which method you will use to move the patient onto the mattress. If you use the logroll, evacuate the mattress until it is partially rigid (this step is not needed if you are using the scoop stretcher method). The surface should be smooth and the beads should be spread out as evenly as possible. If using a scoop stretcher, you do not need to partially evacuate the mattress at this stage.	1		
Move the patient onto the vacuum mattress using the method you determined during the previous step. Maintain spinal alignment.	1		
If the vacuum mattress is partially rigid, open the valve to allow air to enter. Keep the valve open until the mattress is pliable.	1		
Conform the mattress to each side of the patient's head close to the shoulders, but not the top of the head. Continue to hold these "head blocks" that you have formed, and have a second person hold up the sides of the mattress to the patient's hips until the mattress is evacuated of air completely. Always form the mattress to meet the needs of the patient.	1		
Secure the patient's chest, hips, and legs in the mattress.	1		
Secure the patient's head with medical tape. Pad any voids at the top of the shoulders.	1		
Ensure the patient is as comfortable as possible, then evacuate the remaining air to achieve immobilization.	1		

Disconnect the vacuum pump and ensure that the valve is closed or secured so the mattress is not accidentally deflated.	1		
Reassess and adjust the straps around the chest, hips, and legs.	1		
Check the patient's neurovascular status and recheck all straps prior to lifting or moving the patient.	1		
Must receive 9 out of 12 points.			

Comments: \_\_\_\_\_

Failure of any of the CPIs is an automatic failure.

Evaluator: \_\_\_\_\_ NSP ID: \_\_\_\_\_

PASS    FAIL

# Skill Guide 21-6

Date: \_\_\_\_\_

(CPI) = Critical Performance Indicator

Candidate: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

## Removing a Helmet from a Patient

Objective: To demonstrate ability to remove a helmet from a patient.			
Skill	Max Points	Skill Demo	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	-	-	
Align the patient axially. Rescuer 1: manually stabilize the head and cervical spine by placing one hand on either side of the helmet.	1		
Rescuer 2: carefully open the face shield and/or remove goggles (if present). Unfasten the chin strap and place one hand at the occiput and the other at the chin. If blood is suspected, use standard precautions. As an alternative method, Rescuer 2 places one hand along either side of the patient's head sliding your hands inside the helmet, so that the fingers are in position to support each side of the face up over the ears. Either method is acceptable.	1		
Remove the helmet. <ul style="list-style-type: none"> <li>Rescuer 1 grasps the helmet straps or sides of the helmet and pulls them apart, spreading the helmet, then pulls the helmet axially away from the patient's head, providing forward rotation of the helmet to ease passage of the chin guard (plastic device that protects the mouth and chin area on some types of ski and other sports helmets) off the face.</li> <li>Rescuer 2 slides the fingers up to the occiput and chin (or on both sides of the head over the ears), ensuring that the patient's head and cervical spine remain immobilized. Continue to stabilize the head until a cervical collar is applied.</li> </ul>	1		
Must receive 2 out of 3 points.			

Comments: \_\_\_\_\_

Failure of any of the CPIs is an automatic failure.

Evaluator: \_\_\_\_\_ NSP ID: \_\_\_\_\_

PASS      FAIL