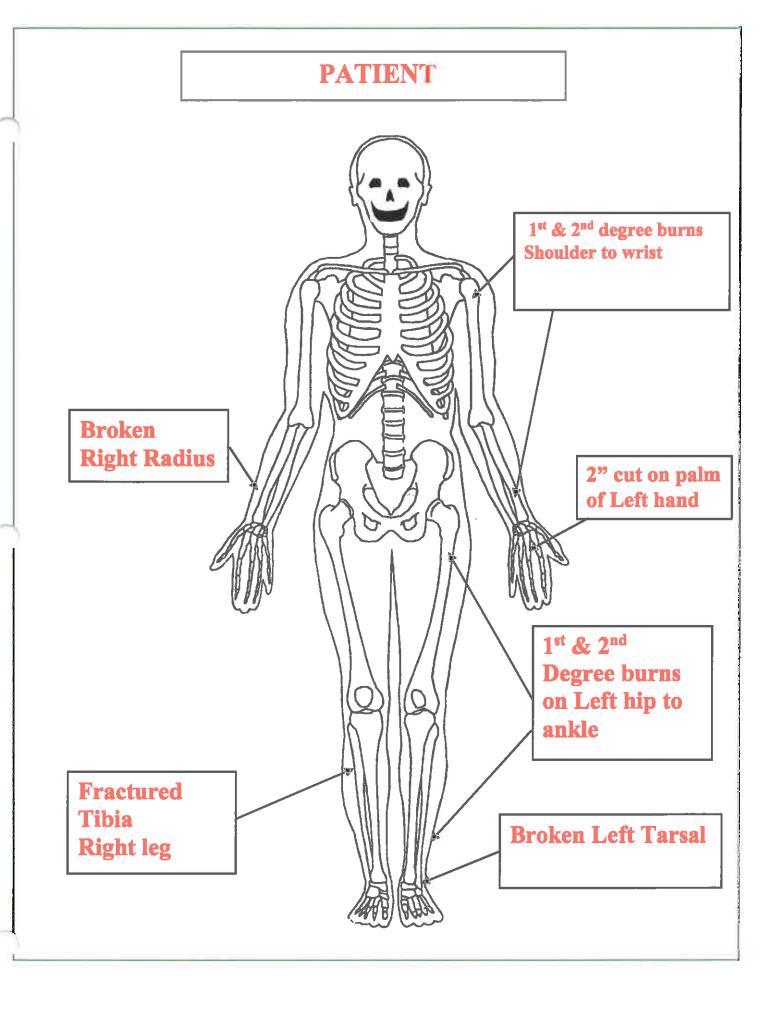
West Virginia State Competition

Post #5

2016

First Aid Problem

While working on the dayshift at the Sugarcreek #7 Mine, you and your first aid partner are called to an accident at the #2 North beltline drive. A fire occurred while belt cleaner, John Johnson, was working on the elevated walkway at the drive. Trapped by the fire he jumped to the ground and made his way to a safe area in fresh air by the phone in the main track entry where he called from. When you arrive at the scene he is laying on his back unconscious, no pulse, and not breathing. Perform one set of 2-man CPR, and each contestant will perform one set of A.V. John will then have a pulse and be breathing. Treat and prepare for transportation.



2016

POST #5 FIRST AID LIST OF INJURIES

- 1ST & 2ND DEGREE BURNS LEFT SHOULDER TO WRIST
- 2" CUT ON PALM OF LEFT HAND
- 1ST & 2ND DEGREE BURNS ON LEFT HIP TO ANKLE
- BROKEN LEFT TARSAL
- FRACTURED TIBIA RIGHT LEG
- BROKEN RIGHT RADIUS

TW0-RESCUER CPR (NO SPINAL INJURY - MANIKIN ONLY)

	PROCEDURES			CRITICAL SKILL
1.	RESCUER 1 - ESTABLISH UNRESPONSIVENESS	00000	A. *B. C. *D. *E.	Tap or gently shake shoulders "Are you OK?" Determine unconsciousness without compromising cervical spine (neck) injury "Call for help" "Get AED" (Note: If AED is used, follow local protocol)
2.	RESCUER 1 - MONITOR PATIENT FOR BREATHING	_	A.	Look for absence of breathing (no chest rise and fall) or gasping breaths, which are not considered adequate (within 10 seconds)
3.	RESCUER 1 - CHECK FOR CAROTID PULSE	0 0	A. B. *C.	Correctly locate the carotid pulse - on the side of the rescuer, locate the patient's windpipe with your index and middle fingers and slide your fingers in the groove between the windpipe and the muscle in the neck Check for presence of carotid pulse for 5 to 10 Seconds Absence of pulse
4.	RESCUER 2 - POSITION FOR COMPRESSIONS	0 0 0	В.	Locate the compression point on the breastbone between the nipples Place the heel of one hand on the compression point and the other hand on top of the first so hands are parallel. Do not intentionally rest fingers on the chest. Keep heel of your hand on chest during and between compressions.
5.	RESCUER 2 - DELIVER CARDIAC COMPRESSION	0 0	A. B. C.	compression line
6.	RESCUER 1 - ESTABLISH AIRWAY	0 0	A. B.	Kneel at the patient's side near the head Correctly execute head-tilt/ chin-lift maneuver

7.	RESCUER 1 - VENTILATIONS BETWEEN COMPRESSIONS	0	 A. Place barrier device (pocket mask / shield with or way valve) on manikin B. Give 2 breaths 1 second each C. Each breath - minimum of .8 (through .7 liter line new manikins) D. Complete breaths and return to compressions in lethan 10 seconds (This will be measured from the eof last down stroke to the start of the first down stoff the next cycle.) 	on ess nd roke
8.	CONTINUE CPR FOR TIME STATED IN PROBLEM	0 0 0 0 0	 A. Provide 5 cycles of 30 chest compressions and 2 rebreaths B. To check for pulse, stop chest compressions for no more than 10 seconds after the first set of CPR C. Rescuer at patient's head maintains airway and cheor adequate breathing or coughing D. The rescuer at the patient's head shall feel for a carpulse E. If no signs of circulation are detected, continue che compressions and breaths and check for signs of circulation after each set F. A maximum of 10 seconds will be allowed to compressions and required pulse checks between se (this will be measured from the end of the last down stroke to the start of the first down stroke of the ne cycle 	ecks rotid est plete ts
9.	CHANGING RESCUERS	0	A. Change of rescuers shall be made in 5 seconds or learn will be completed as outlined in the problem. Team must switch every 5 cycles in less than 5 seconds.	ess
10.	CHECK FOR RETURN OF PULSE	0 0	After providing required CPR (outlined in problem check for return of pulse (within 10 seconds) *A. "Patient has a pulse."	n),

MOUTH-TO-MASK RESUSCITATION

PROCEDURES

PROCEDURES		CRITICAL SKILL
1. ESTABLISH UNRESPONSIVENESS	00000	A. Tap or gently shake shoulders *B. "Are you OK?" C. Determine unconsciousness without compromising C-spine injury *D. "Call for help" *E. "Get AED" (Note: If AED is used, follow local protocol)
2. MONITOR PATIENT FOR BREATHING		A. Look for absence of breathing (no chest rise and fall) or gasping, which are not considered adequate (within 10 seconds)
3. CHECK FOR CAROTID PULSE	0 0 0	 A. Correctly locate the carotid pulse (on the side of the rescuer) B. Check for presence of carotid pulse within 10 seconds *C. Presence of pulse
4. ESTABLISH AIRWAY	6	A. Correctly execute head tilt / chin lift or jaw thrust maneuver depending on the presence of cervical spine (neck) injuries
5. VENTILATE PATIENT	0	 A. Place barrier device (pocket mask/shield with one-way valve on manikin B. Ventilate patient 10 to 12 times per minute. Each ventilation will be provided at a minimum of .8 (through .7 liter line on new manikins)
6. CHECK FOR RETURN OF BREATHING AND PULSE	E .	A. After providing the required number of breaths (outlined in problem), check for return of breathing and carotid pulse within 10 seconds *B. "Patient is breathing and has a pulse"

INITIAL ASSESSMENT

PROCEDURES		CRITICALSKILL
1. SCENE SIZE UP	0 0	*A. Observe area to ensure safety *B. Call for help
2. MECHANISM OF INJURY	000	*A. Determine causes of injury, if possible *B. Triage: Immediate, Delayed, Minor or Deceased. *C. Ask patient (if conscious) what happened
3. INITIAL ASSESSMENT	0 0	*A. Verbalize general impression of the patient(s) *B. Determine responsiveness/level of consciousness (AVPU) Alert, Verbal, Painful, Unresponsive *C. Determine chief complaint/apparent life threat
4. ASSESS AIRWAY AND BREATHING	0	 A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver, depending on the presence of cervical spine (neck) injuries B. Look for absence of breathing (no chest rise and fall) or gasping, which are not considered adequate (within 10 seconds) C. If present, treat sucking chest wound
5. ASSESS FOR CIRCULATION	0 0 0	 A. Check for presence of a carotid pulse (5-10 seconds) B. If present, control life threatening bleeding C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).

(JUDGES NOTE) Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

PATIENT ASSESSMENT

PROCEDURES

PROCEDURES				CKITCAL SKILL
1. HEAD	3 0		*B.	Check the face Check the ears for bleeding or clear fluids Check the eyes for any discoloration, unequal pupils, reaction to light, foreign objects and bleeding Check the nose for any bleeding or drainage Check
2. NECK			*A. *B.	Check the neck for DOTS Inspect for medical ID
3. CHEST				Check chest area for DOTS Feel chest for equal breathing movement on both sides Feel chest for inward movement in the rib areas during inhalations
4. ABDOMEN	_		*A.	Check abdomen (stomach) for DOTS
5. PELVIS	C		*A. *B.	Check pelvis for DOTS Inspect pelvis for injury by touch (Visually inspect and verbally state inspection of crotch and buttocks areas)
6. LEGS	L O O O	R D D D D D	*A. B. C. *D.	Check each leg for DOTS Inspect legs for injury by touch Unresponsive: Check legs for paralysis (pinch inner side of leg on calf) Responsive: Check legs for motion; places hand on bottom of each foot and states "Can you push against my hand?" Check for medical ID bracelet
7. ARMS		R		Inspect arms for injury by touch Unresponsive: Check arms for paralysis (pinch inner side of wrist) Responsive: Check arms for motion (in a conscious patient; team places fingers in each hand of patient and states "Can you squeeze my fingers?"
8. BACK SURFACES	C		*A.	Check back for DOTS

Fractured Tibia, Right leg

SPLINTING (RIGID OR SOFT) PELVIC GIRDLE, THIGH, KNEE, AND LOWER LEG

	PROCEDURE		CRITICAL SKILL
1.	DETERMINE NEED FOR SPLINTING		*A. Assess for: Pain Swelling Deformity B. Determine if splinting is warranted
2.	APPLY MANUAL STABILIZATION	۵	A. Support affected limb and limit movement Do not attempt to reduce dislocations
3.	SELECT APPROPRIATE SPLINT	0	A. Select appropriate splinting method depending on position of extremity and materials available B. Select appropriate padding material
4.	PREPARE FOR SPLINTING	0 0	A. Remove or cut away clothing as needed *B. Assess distal circulation, sensation, and motor function C. Cover any open wounds with sterile dressing and bandage D. Measure splint E. Pad around splint for patient comfort

Fractured Tibia, Right leg

		A. Maintain support while splinting
		Living Splint:
		A. Immobilize the site of the injury
		B. Carefully place a pillow or folded blanket
		between the patients knees/legs
	۵	C. Bind the legs together with wide straps or
	-	cravats
		D. Carefully place patient on long spine board
		E. Secure the patient to the long spine board (if
		primary splint)
		*F. Reassess distal circulation, sensation, and motor
		function
		Padded Board Splint:
		A. Splint with two long padded splinting boards
		(one should be long enough to extend from the
		patient's armpit to beyond the foot. The other
		should extend from the groin to beyond the
- CDT D TT		foot.) (Lower leg requires boards to extend from
5. SPLINT		knee to below the foot.)
		B. Cushion with padding in the armpit and groin
		and all voids created at the ankle and knee
		C. Secure the splinting boards with straps and
}	_	cravats
	_	D. Carefully place the patient on long spine board
1		E. Secure the patient to the long spine board (if
	_	primary splint)
		*F. Reassess distal circulation, sensation, and motor
	,	function
		Other Splints:
		A. Immobilize the site of the injury
		B. Pad as needed
		C. Secure to splint distal to proximal
		D. Carefully place patient on long spine board E. Secure the patient to the long spine board (if
		primary splint)
		*F. Reassess distal circulation, sensation, and motor
	_	function
6. REASSESS	0	*A. Assess patient response and level of comfort

BROKEN LEFT TARSALS

SPLINTING (SOFI) LOWER EXTREMITY FRACTURES AND DISLOCATIONS (ANKLE AND FOOT)

PROCEDURES CRITICAL SKILL *A. Assess for distal circulation, sensation, and 1. CARE FOR motor function **FRACTURE** B. Do not attempt to reduce dislocations (if applies) A. Support affected limb and limit movement B. Place three cravats (triangular bandage) under C. Place pillow length wise under ankle/foot, on top of cravats (pillow should extend 6 inches 2. IMMOBILIZING beyond foot) **FRACTURE** D. Lower limb, adjust cravats to tie E. Tie cravats distal to proximal F. Elevate with blanket or pillow

function

*G. Reassess distal circulation, sensation, and motor

1st & 2nd degree Burns Left Hip to ankle

PROCEDURES	0. 2	CRITICAL SKILLS
1. DETERMINE BURN TYPE	В	*A. Determine type Thermal Chemical Electrical
2. DETERMINE BODY SURFACE AREA		*A. Determine Body Surface Area (BSA) using rule of nines
	0	*A. Remove patient from source of burn and prevent further contamination
		*B. Consider the type of burn and stopping the burning process initially with water or saline if appropriate
3. BURN CARE (All Types)	0	*C. Remove jewelry *D. Continually monitor the airway for evidence of closure
	0 0	*E. Cover the burned area with a dry sterile dressing *F. Do not use any type of ointment, lotion or antiseptic *G. Do not break blisters *H. Ensure patient does not get hypothermic
	D.	A. Protect yourself from exposure to hazardous materials
		B. Wear gloves, eye protection, and respiratory protection
4. CARE FOR CHEMICAL BURNS	0	*C. Brush off dry powders *D. Consider flushing with large amounts of water *E. Continue flushing the contaminated area if applicable
		*F. Use caution not to contaminate uninjured areas when

Judges note: this is a Thermal Burn

flushing or brushing

1st & 2nd degree Burns Left Hip to ankle

*A. Ensure safety before removing patient from the electrical source *B. If the patient is still in contact with the electrical source or you are unsure, do not approach or touch the patient, contact power company *C. Monitor the patient closely for respiratory and cardiac arrest D. Treat the soft tissue injuries associated with the burn *E. Look for both an entrance and exit wound *A. Reassess level of consciousness (AVPU), respiratory status, and patient response	1.	QLZ	degree burns -
source or you are unsure, do not approach or touch the patient, contact power company *C. Monitor the patient closely for respiratory and cardiac arrest D. Treat the soft tissue injuries associated with the burn *E. Look for both an entrance and exit wound *A. Reassess level of consciousness (AVPU), respiratory			
*C. Monitor the patient closely for respiratory and cardiac arrest D. Treat the soft tissue injuries associated with the burn *E. Look for both an entrance and exit wound *A. Reassess level of consciousness (AVPU), respiratory	5. CARE FOR		source or you are unsure, do not approach or touch
*E. Look for both an entrance and exit wound *A. Reassess level of consciousness (AVPU), respiratory	ELECTRICAL		*C. Monitor the patient closely for respiratory and
*A. Reassess level of consciousness (AVPU), respiratory			-
	Y		
	6. REASSESS		

Multiple burns will be treated as per procedures listed in patient assessment.

BROKEN RIGHT RADIUS

SPLINTING UPPER EXTREMITY/LOWER EXTREMITY FRACTURES

(AIR SPLINT)

	PROCEDURES		CRITICAL SKILL
	CARD FOR EDACTION		*A. Assess distal circulation, sensation, and motor
1.	CARE FOR FRACTURE		function(fingers/toes)
		ò	A. Grasp above and below the injury site
			B. Maintain support
			C. Properly apply air splint
2.	IMMOBILIZE		D. Splint should be relatively free of wrinkles
	FRACTURE		E. Inflate splint to point that slight dent can be
			made
			*F. Reassess distal circulation, sensation, and motor
			function (fingers/toes)
		-	*A. Periodically check for increase or decrease in
	MONITOR AIR- INFLATED SPLINT		pressure
3.			*B. Monitor pressure in splint with finger tip
		-	C. Make sure desired pressure is maintained
		0	*D. Reassess distal circulation, sensation, and motor
			function (fingers/toes)

NOTE: Air splints may not be used with open (protruding bones) fractures.

Air splints may only be used on the lower part of the extremities (from below the elbow on the arm and below the knee to the leg).

BROKEN RIGHT RADIUS

Splinting (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

	PROCEDURES		CRITICAL SKILL
1.	CARE FOR FRACTURE	0	*A. Check for distal circulation, sensation, and motor function Do not attempt to reduce dislocations (if applies)
		0	A. Selection of appropriate rigid splint of proper length
			B. Support affected limb and limit movement
			C. Apply appropriate padded rigid splint against injured extremity
2.	IMMOBILIZING FRACTURE	_	D. Place appropriate roller bandage in hand to ensure the position of function
		0	E. Secure splint to patient with roller bandage, handkerchiefs, cravats, or cloth strips
			F. Apply wrap distal to proximal
			*G. Reassess distal circulation, sensation, and motor function
			A. Place sling over chest and under arm
			B. Hold or stabilize arm
		0	C. Triangle should extend behind elbow on injured side
	SECURING WITH	_	D. Pull sling around neck and tie on uninjured side
3.	SLING		E. Pad at the neck (except when C-Collar is present)
		0	F. Secure excess material at elbow
			G. Fingertips should be exposed
			*H. Reassess distal circulation, sensation, and motor function
			A. Use triangle cravat or factory swathe
4.	SECURING SLING	0	B. Swathe is tied around chest and injured arm
	WITH SWATHE		*C. Reassess distal circulation, sensation, and motor function

1st & 2nd degree burns Left shoulder to wrist

PROCEDURES CRITICAL SKILLS

PROCEDURES		CRITCAL SRIED
1. DETERMINE BURN TYPE	0	*A. Determine type Thermal Chemical Electrical
2. DETERMINE BODY SURFACE AREA	o	*A. Determine Body Surface Area (BSA) using rule of nines
	D	*A. Remove patient from source of burn and prevent further contamination
	0	*B. Consider the type of burn and stopping the burning process initially with water or saline if appropriate
3. BURN CARE (All Types)	0	*C. Remove jewelry *D. Continually monitor the airway for evidence of closure
	0 0	*E. Cover the burned area with a dry sterile dressing *F. Do not use any type of ointment, lotion or antiseptic *G. Do not break blisters *H. Ensure patient does not get hypothermic
		A. Protect yourself from exposure to hazardous materials
	0	B. Wear gloves, eye protection, and respiratory protection
4. CARE FOR CHEMICAL BURNS	0 0	*C. Brush off dry powders *D. Consider flushing with large amounts of water *E. Continue flushing the contaminated area if applicable *F. Use caution not to contaminate uninjured areas when
		flushing or brushing

Judges note: this is a Thermal Burn

1st & 2nd degree burns Left shoulder to wrist

5. CARE FOR ELECTRICAL BURNS		*A. Ensure safety before removing patient from the electrical source *B. If the patient is still in contact with the electrical source or you are unsure, do not approach or touch the patient, contact power company *C. Monitor the patient closely for respiratory and cardiac arrest D. Treat the soft tissue injuries associated with the burn *E. Look for both an entrance and exit wound
6. REASSESS	0	*A. Reassess level of consciousness (AVPU), respiratory status, and patient response

Multiple burns will be treated as per procedures listed in patient assessment.

2" cut on palm of left hand

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES		CRITICAL SKILL
1. EMERGENCY CARE FOR AN OPEN WOUND	0 0 0	*A. Control bleeding *B. Prevent further contamination *C. Bandage dressing in place after bleeding has been controlled *D. Keep patient lying still
2. APPLY DRESSING	0 0 0 0	A. Use sterile dressing B. Cover entire wound C. Control bieeding D. Do not remove dressing
3. APPLY BANDAGE	00000	 A. Do not bandage too tightly. B. Do not bandage too loosely. C. Do not leave loose ends. D. Cover all edges of dressing. E. Do not cover tips of fingers and toes, unless they are injured. F. Bandage from the bottom of the limb to the top (distal to proximal) if applicable.

TWO-PERSON LOG ROLL

TWO-PERSON LOG ROLL

PROCEDURES

	TROCEDURES		CRITCAL SRILL
1. 5	STABILIZE HEAD	o o	*A. Stabilize the head and neck
		0	A. When placing patient on board place board parallel to the patient
1	PREPARING THE PATIENT		B. Kneel at the patient's shoulders opposite the board (if used) leaving room to roll the patient toward knees Raise the patient's arm, if not injured (the one closer to the rescuer) above the patient's head
	PREPARING THE RESCUER	0	A. Grasp the patient at the shoulder and pelvis area B. Give instructions to bystander, if used to support
		0	A. While stabilizing the head, roll the patient toward the rescuer by pulling steadily and evenly at the shoulder and pelvis areas
4. I	ROLLING THE	c	B. The head and neck should remain on the same plane as the torso
F	PATIENT	0	C. Maintain stability by holding patient with one hand and placing board (if used) with other
		0	D. Roll the body as a unit onto the board (if used) (board may be slanted or flat)
			E. Place the arm alongside the body

IMMOBILIZATION - LONG SPINE BOARD (Backboard)

PROCEDURES

1. MOVE THE PA	ATIENT		A.	
ONTO THE LONG	I			maintain in-line immobilization of the head and spine
SPINE BOARD)	-	В.	First Aid Provider at the head directs the
				movement of the patient
		0	C.	Other First Aid Provider control movement of the rest of body
		_	D.	
				on same side
			E.	Upon command of First Aid Provider at the head, roll patient onto side toward First Aid
				Providers
			F.	Quickly assess posterior body, if not already done
			G.	
				top of board beyond top of head
			H.	Place patient onto the board at command of the First Aid Provider at head while holding in-line
				immobilization using methods to limit spinal
			_	movement
			I.	Slide patient into proper position using smooth coordinated moves keeping spine in alignment
4 747				1 0 1
2. PAD VOIDS BI PATIENT ANI			A. B.	Select and use appropriate padding Place padding as needed under the head
SPINE BOARD			C.	Place padding as needed under torso
3. IMMOBILIZE	RODV		Α.	Strap and secure body to board ensuring spinal
TO THE LONG			Δ.	immobilization, beginning at shoulder and
BOARD				working toward feet
4. IMMOBILIZE	HEAD	0	A.	Using head set or place rolled towels on each
TO THE LONG			T.	side of head
BOARD			В.	Tape and/or strap head securely to board, ensuring cervical spine immobilization
5. REASSESS			*A.	Reassess distal circulation, sensation, and
J. 12110100				motor function
			*B.	Assess patient response and level of comfort

SHOCK

SHOCK

PROCEDURES	CRITICAL SKILL	
CHECK FOR SIGNS AND SYMPTOMS OF SHOCK	*A. Check for pale (or bluish) skin (in victim widark skin examine inside of mouth and nailbeds for bluish coloration. *B. Check for cool, clammy skin *C. Check for weakness	ilı
2. TREATMENT	 A. Keep victim lying down B. Cover with blanket to prevent loss of body heat and place a blanket under the patient. (Do not try to place blanket under patient we possible spinal injuries) C. Elevate according to injury *D. Reassure and calm the patient 	ith

Option 1: Elevate the lower extremities or foot end of the back board. This procedure is performed in most cases. Place the patient flat, face up and elevate the legs or foot end of the back board 8 to 12 inches. Do not elevate any limbs with possible fractures or pelvic injuries until they have been properly splinted. Remember to consider the mechanism of injury for every patient.

Option 2: Lay the patient flat, face up. This is the supine position, used for patients with a spinal injury and patients who have serious injuries to the extremities that have not been supported. If the patient is placed in this position, you must constantly be prepared for vomiting.

Option 3: Slightly raise the head and shoulders. This position should be used only for responsive patients with no spinal injuries, life threatening chest or abdominal injuries and only for patients having difficulty breathing, but who have an open airway. A semi-seated position can also be used for patients with a history of heart problems. It is not recommended for moderate to severe cases of shock. Be certain to keep the patient's head from tilting forward.

Note: Injuries requiring the injured side to be tilted or placed down may be done after patient has been properly secured to a back board if a back board is required.