Post 7 First Aid Contest 2023

TEAM STATEMENT (GIVEN AFTER CLOCK IS STARTED)

You and your First Aid Partners have responded to an accident that occurred at the 3-South #2 Belt Drive. The maintenance foreman in charge of a 3 man crew called for help when one of his mechanics was struck by a large metal bar. The object that struck the mechanic was under tension and came loose, hitting him in the chest and knocking him into the side of the belt transfer chute. The crew was able to stop the belt and bleed all tension from the unit before any further incident or injury occurred.

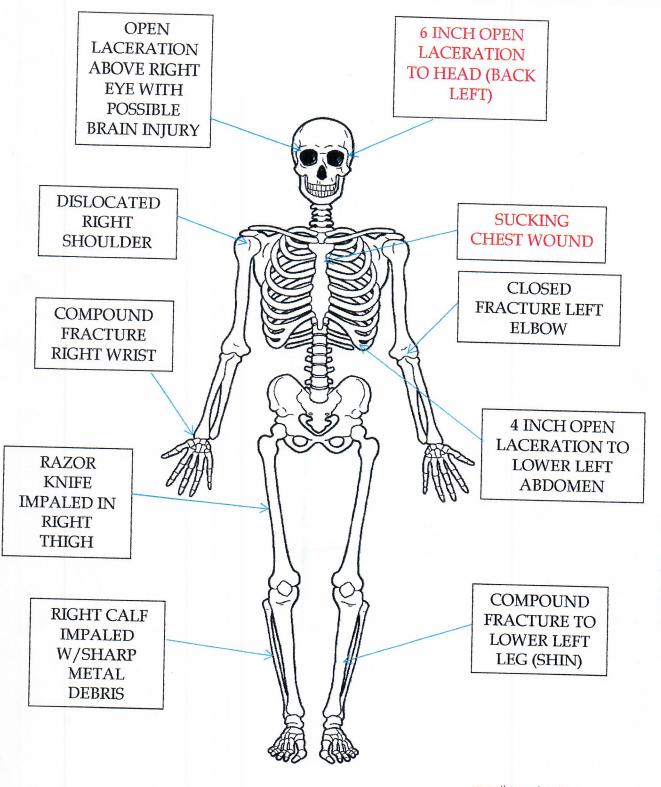
Upon arrival to the belt drive area, you find John Johnson in an unconscious state on the mine floor. You are met by the foreman and the other members of the maintenance crew. They warn you that the bar also struck several other items and Mr. Johnson may have been injured by the tools that were in his hand when he was struck by the bar.

The foreman stated that Mr. Johnson is unconscious but is confirmed to be alive and breathing on his own.

Unfortunately, you and your first aid partners have been working in other areas of the mine all shift and your mantrip battery is nearly dead. The maintenance crew has a ride but it's blocked inby the drive by the belt and rails that came loose during the incident. Transport to the surface is not currently possible but help is on the way.

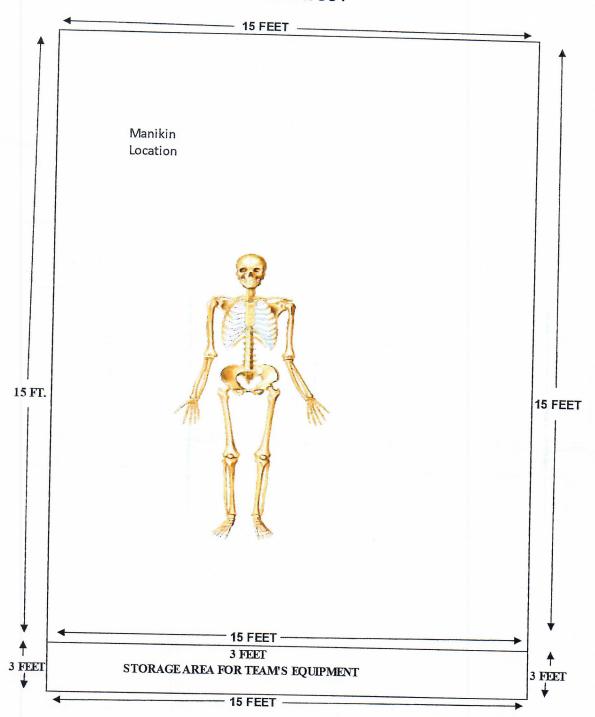
Please treat all injuries & prepare John Johnson for transport once a ride arrives and transportation is possible.

Your problem will be completed when the patient is prepared to be transported to the surface and the clock is stopped. Thank you for your help!!



www.timvandevall.com Copyright © 2014 Dutch Renaissance Press LLC.





NOTE: Each critical skill identified with an asterisk () shall be clearly verbalized by the team as it is being conducted at contest <u>not</u> utilizing moulage. Each critical skill identified with a double asterisk (**) shall be clearly verbalized by the team as it is being conducted at all contests. After initially stating what BP-DOC- Bleeding, Pain, Deformities, Open wounds stands for, the team may simply state BP-DOC- Bleeding, Pain, Deformities, Open wounds when making their checks. Teams my use the acronym "CSM" when checking circulation, sensation and motor function.

INITIAL ASSESSMENT

PROCEDURES	I IAL F	CRITICAL SKILLS
1. SCENE SIZE UP	0	**A. Observe area to ensure safety **B. Call for help
2. MECHANISM OF INJURY		**A. Determine causes of injury, if possible **B. Triage: Immediate, Delayed, Minor or Deceased. **C. Ask patient (if conscious) what happened
3. INITIAL ASSESSMENT		**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		 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		A. Check for presence of a carotid pulse (5-10 B. seconds) C. If present, control life threatening bleeding Start treatment for all other lifethreatening injuries/conditions (Rule 2).

<u>DELAYED</u>: Detailed Patient Assessment treating all injuries and conditions and prepare for transport.

^{** 2} life threatening injuries will be found & should be treated during the initial assessment. The order in which these are found and treated does not matter.

6 INCH OPEN LACERATION TO HEA (BACK LEFT SIDE) (CONTROLLED WITH DIRECT PRESSURE)

TREATMENT OF LIFE THREATENING BLEED

PROCEDURES CRITICAL SKILLS

1. DIRECT PRESSURE AND ELEVATION		 *A. Apply direct pressure with a gloved hand *B. Apply a dressing to wound (cover entire wound) and continue to apply direct pressure *C. Elevate the extremity except when spinal injury exists **D. Bleeding has been controlled *E. If controlled, bandage dressing in place
-------------------------------------	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

External Bleeding

To Control: 1st: direct pressure

2nd: elevation & direct

pressure

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES CRITICAL SKILLS *A. Control bleeding 1. EMERGENCY CARE *B. Prevent further contamination *C. Bandage dressing in place after bleeding has been FOR AN OPEN controlled WOUND *D. Keep patient lying still A. Use sterile dressing B. Cover entire wound 2. APPLY DRESSING C. Control bleeding D. Do not remove dressing

		A.	Do not bandage too tightly.
		B.	Do not bandage too loosely.
3. APPLY BANDAGE	APPLY BANDAGE	C.	Cover all edges of dressing.
		D.	Do not cover tips of fingers and toes, unless they are injured.
		E.	Bandage from the bottom of the limb to the top (distal to proximal) if applicable.

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

SUCKING CHEST WOUND

LIFE THREATENING INJURY

PROCEDURES	CRITICAL SKILLS
1. EXPOSE WOUND	□ *A. Expose entire wound
2. SEAL WOUND AND CONTROL BLEEDING	 *A. Place occlusive dressing over wound (If occlusive dressing is not available use gloved hand) B. Apply direct pressure as needed to stop the bleeding
3. APPLY AN OCCLUSIVE DRESSING	 A. Keep patient calm and quiet **B. Explain to the patient what you are doing *C. Ensure dressing is large enough not to be sucked into the wound (two inches beyond edges of wound) D. Affix dressing with tape *E. Seal on three sides **F. Monitor patient closely for increasing difficulty breathing G. Transport as soon as possible H. Keep patient positioned on the injured side unless other injuries prohibit **I. Reassess wound to ensure bleeding control **J. Assess level of consciousness(AVPU), respiratory status and patient response

*TEAMS SHOULD NOW CONTINUE PATIENT ASSESSMENT AFTER TREATING LIFE THREATENING INJURIES

PATIENT ASSESSMENT (Overview Checklist; See separate skill sheets for assessment and treatment requirements for each injury that's found as the team works through the assessment)

PATIENT ASSESSMENT

PROCEDURES			CRITICAL SKILLS
1. HEAD			 **A. Check head for BP-DOC: Bleeding, Pain, Deformities, Open wounds, Crepitus **B. Check and touch the scalp **C. Check the face **D. Check the ears for bleeding or clear fluids **E. Check the eyes for any discoloration, unequal pupils, reaction to light, foreign objects and bleeding **F. Check the nose for any bleeding or drainage **G. Check the mouth for loose or broken teeth, foreign objects, swelling or injury of tongue, unusual breath odor and discoloration
2. NECK		0	**A. Check the neck BP-DOC **B. Inspect for medical ID
3. CHEST		0 0	**A. Check chest area for BP-DOC **B. Feel chest for equal breathing movement on both **C. sides Feel chest for inward movement in the rib areas during inhalations
4. ABDOMEN			**A. Check abdomen (stomach) for BP-DOC
5. PELVIS]	**A. Check pelvis for BP-DOC **B. Inspect pelvis for injury by touch (Visually inspect and verbally state inspection of crotch and buttocks areas)
6. LEGS	L	R	 **A. Check each leg for BP-DOC B. Inspect legs for injury by touch C. Unresponsive: Check legs for paralysis (pinch inner side of leg on calf) **D. Responsive: Check legs for motion; places hand on bottom of each foot and states "Can you push against my hand?" **E. Check for medical ID bracelet

7. ARMS	L	R	 **A. Check each arm for BP DOC B. Inspect arms for injury by touch C. Unresponsive: Check arms for paralysis (pinch inner side of wrist) **D. Responsive: Check arms for motion (in a conscious patient; team places fingers in each hand of patient and states "Can you squeeze my fingers?" **E. Check for medical ID bracelet
8. BACK SURFACES			**A. Check back for BP DOC

COMPOUND FRACTURE TO LOWER LEFT LEG

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

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

RIGHT CALF IMPALED W/SHARP METAL DEBRIS

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES		CRITICAL SKILLS
1. EMERGENCY CARE FOR AN OPEN WOUND		 *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		 A. Use sterile dressing B. Cover entire wound C. Control bleeding D. Do not remove dressing
3. APPLY BANDAGE	0 0 0	 A. Do not bandage too tightly. B. Do not bandage too loosely. C. Cover all edges of dressing. D. Do not cover tips of fingers and toes, unless they are injured. E. Bandage from the bottom of the limb to the top (distal to proximal) if applicable.

Impaled Objects

- *1. Do not remove
- 2. Expose wound
- 3. Control bleeding
- 4. Stabilize with a bulky dressing; criss-cross the layers
- 5. Tie 4in. wide cravats around to hold in place, or tape in place
- *6. Check for exit wound (treat when found)
- 7. Immobilize affected area

RAZOR KNIFE IMPALED IN RIGHT THIGH

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES		CRITICAL SKILLS
1. EMERGENCY CARE FOR AN OPEN WOUND		 *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		A. Use sterile dressingB. Cover entire woundC. Control bleedingD. Do not remove dressing
3. APPLY BANDAGE	0 0 0	 A. Do not bandage too tightly. B. Do not bandage too loosely. C. Cover all edges of dressing. D. Do not cover tips of fingers and toes, unless they are injured. E. Bandage from the bottom of the limb to the top (distal to proximal) if applicable.

Impaled Objects

- *1. Do not remove
- 2. Expose wound
- 3. Control bleeding
- 4. Stabilize with a bulky dressing; criss-cross the layers
- 5. Tie 4in. wide cravats around to hold in place, or tape in place
- *6. Check for exit wound (treat when found)
- 7. Immobilize affected area

COMPOUND FRACTURE RIGHT WRIST

SPLINTING (SOFT) UPPER EXTREMITY FRACTURES AND DISLOCATIONS (WRIST AND HAND)

PROCEDURES	1	CRITICAL SKILLS
1. CARE FOR FRACTURE		**A. Check for distal circulation, sensation, and motor functionB. Do not attempt to reduce dislocations (if applies)
		A. Support affected limb and limit movement B. Place two cravats (triangular bandage) under wrist/hand
2. IMMOBILIZING FRACTURE		C. Place pillow length wise under wrist/hand, on top of cravats (pillow should extend past fingertips)
		D. Lower limb, adjust cravats to tie E. Tie cravats distal to provimal
		The distance proximal
		A. Place sling over chest and under arm
		B. Hold or stabilize arm
3. SECURING WITH SLING		C. Triangle should extend behind elbow or injured side
		D. Secure excess material at elbow
		E. Fingertips should be exposed
		**F. Reassess distal circulation, sensation, and motor function
		A. Use triangle cravat or factory swathe
4. SECURING SLING		B. Swathe is tied around chest and injured arm
WITH SWATHE	_	**C. Reassess distal circulation, sensation, and
		motor function

DISLOCATED RIGHT SHOULDER

SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

PROCEDURES		CRITICAL SKILLS
1. CARE FOR FRACTURE		**A. Check for distal circulation, sensation, and motor function Do not attempt to reduce dislocations (if applies)
2. Skip		na
3. SECURING WITH SLING		 A. Place sling over chest and under arm B. Hold or stabilize arm C. Triangle should extend behind elbow on injured side D. Pull sling around neck and tie on uninjured side E. Pad at the neck (except when C-Collar is present) F. Secure excess material at elbow G. Fingertips should be exposed **H. Reassess distal circulation, sensation, and motor function
4. SECURING SLING WITH SWATHE	_ _	 A. Use triangle cravat or factory swathe B. Swathe is tied around chest and injured arm **C. Reassess distal circulation, sensation, and motor function

SHOULDER BLADE

Support and limit movement of affected area Follow Procedures No. 1, No. 3 and No. 4 above

NOTE: Do not reposition dislocations

4 INCH OPEN LACERATION TO LOWER LEFT ABDOMEN

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES	CRITICAL SKILLS
1. EMERGENCY CARE FOR AN OPEN WOUND	 *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	 A. Use sterile dressingB. Cover entire woundC. Control bleedingD. Do not remove dressing
3. APPLY BANDAGE	 A. Do not bandage too tightly. B. Do not bandage too loosely. C. Cover all edges of dressing. D. Do not cover tips of fingers and toes, unless they are injured. E. Bandage from the bottom of the limb to the top (distal to proximal) if applicable.

Abdominal Injury

*1. Place on back with legs flexed at the knees (for closed or open wounds)

CLOSED FRACTURE LEFT ELBOW

SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

PROCEDURES	CRITICAL SKILLS
1. CARE FOR FRACTURE	**A. Check for distal circulation, sensation, and motor function Do not attempt to reduce dislocations (if applies)
	A. Selection of appropriate rigid splint of proper length
	B. Support affected limb and limit movement
2 IMMODILIZING	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
	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
	H. Place sling over chest and under arm
	I. Hold or stabilize arm
	J. Triangle should extend behind elbow on injured side
3. SECURING WITH SLING	K. Pull sling around neck and tie on uninjured side
	L. Pad at the neck (except when C-Collar is present)
	M. Secure excess material at elbow
	N. Fingertips should be exposed
	**H. Reassess distal circulation, sensation, and motor function
	C. Use triangle cravat or factory swathe
4. SECURING SLING	D. Swathe is tied around chest and injured arm
WITH SWATHE	**C. Reassess distal circulation, sensation, and motor function

ELBOW (STRAIGHT POSITION)

Follow Procedures No. 1 and No. 2 above

OPEN LACERATION ABOVE RIGHT EYE WITH POTENTIAL BRAIN INJURY

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES	CRITICAL SKILLS			
1. EMERGENCY CARE FOR AN OPEN WOUND	 *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	A. Use sterile dressingB. Cover entire woundC. Control bleedingD. Do not remove dressing			
3. APPLY BANDAGE	 A. Do not bandage too tightly. B. Do not bandage too loosely. C. Cover all edges of dressing. D. Do not cover tips of fingers and toes, unless they are injured. E. Bandage from the bottom of the limb to the top (distal to proximal) if applicable. 			

Skull Fractures and Brain Injuries

- *1. Open airway with jaw thrust
- 2. Apply collar
- *3. Use loose gauze dressing- no direct pressure
- **4. Keep at rest, ask them questions
- 5. Don't elevate legs (on or off a backboard)
- 6. After entire body is immobilized- tilt back board, injured side down

*AFTER ALL INJURIES HAVE BEEN TREATED BY THE TEAM (AT LEAST THE ONES THEY PLAN ON TREATING) AND THE BACK SURFACES HAVE BEEN CHECKED FOR DOTS AND GIVE THE TEAM ENVELOPE #1

ONE-PERSON CPR (MANIKIN ONLY)

PROCEDURES CRITICAL SKILLS A. Tap or gently shake shoulders **B. "Are you OK?" C. 1. RESCUER ESTABLISH Determine unconsciousness without compromising UNRESPONSIVENESS cervical spine (neck) injury **D. "Call for help" **E. "Get AED" (Note: If AED is used, follow local protocol) A. 2. RESCUER MONITOR Look for absence of breathing (no chest rise and fall) PATIENT FOR or gasping breaths, which are not considered BREATHING

BREATHING		adequate (within 10 seconds)
3. RESCUER CHECK FOR CAROTID PULSE	0 0 0	 A. 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 B. Check for presence of carotid pulse for 5 to 10 Seconds **C. Absence of pulse D. Immediately start CPR if no pulse
4. POSITION FOR COMPRESSIONS		 A. Locate the compression point on the breastbone between the nipples B. Place the heel of one hand on the compression point and the other hand on top of the first so hands are parallel C. Do not intentionally rest fingers on the chest D. Keep heel of your hand on chest during and between compressions
5. DELIVER CARDIAC COMPRESSION		 A. Give 30 compressions B. Compressions are at the rate of 100-120 per minute C. Down stroke for compression must be on or through compression line D. Return to baseline on upstroke of compression

6. ESTABLISH AIRWAY	 A. Kneel at the patient's side near the head B. Correctly execute head-tilt/ chin-lift or jaw thrust maneuver depending on the presence of cervical spine injuries
7. VENTILATIONS BETWEEN COMPRESSIONS	 A. Place barrier device (pocket mask / shield with one way valve) on manikin Give 2 breaths 1 B. second each C. Each breath - minimum of .8 (through .7 liter line on new manikins) D. Complete breaths and return to compressions in less than 10 seconds (This will be measured from the end of last down stroke to the start of the first down stroke of the next cycle.)
8. CONTINUE CPR FOR TIME STATED IN PROBLEM	 A. Provide 5 cycles of 30 chest compressions and 2 rescue breaths B. To check for pulse, stop chest compressions for no more than 10 seconds after the first set of CPR C. Rescuer opens airway and checks for adequate breathing or coughing D. Rescuer checks for a carotid pulse E. If no signs of circulation are detected, continue chest compressions and breaths and check for signs of circulation after each set F. A maximum of 10 seconds will be allowed to complete ventilations and required pulse checks between sets (this will be measured from the end of the last down stroke to the start of the first down stroke of the next cycle)
9. CHECK FOR RETURN OF PULSE	A. After providing required CPR (outlined in problem), check for return of pulse (within 10 seconds) "Ask judge for presence of a pulse."

^{*} AFTER 2-SETS OF 1-PERSON CPR GIVE ENVELOPE #2

*** TEAM SHOULD NOW PREPARE THE PATIENT FOR TRANSPORTATION

TWO-PERSON LOG ROLL

PROCEDURES	 CRITICAL SKILLS		
1. STABILIZE HEAD	*A. Stabilize the head and neck		
2. PREPARING THE PATIENT	 A. When placing patient on board place board parallel to 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 		
3. PREPARING THE RESCUER	 A. Grasp the patient at the shoulder and pelvis area B. Give instructions to bystander, if used to support		
4. ROLLING THE PATIENT	 A. While stabilizing the head, roll the patient toward the rescuer by pulling steadily and evenly at the shoulder and pelvis areas B. The head and neck should remain on the same plane as the torso C. Maintain stability by holding patient with one hand and placing board (if used) with other 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 		

PROCEDURES CRITICALION - LONG SPINE BOARD (Backboard)

- DIVILOI	IUI	DIMI IN	** AS PFR WRITTE
motor function Assess patient response and level of comfort	*B		
Reassess distal circulation, sensation, and	.A*		2. REASSESS
ensuring cervical spine immobilization			Chrise
side of head Tape and/or strap head securely to board,	B.		BOYKD LO LHE FONC SLINE
Using head set or place rolled towels on each	.A		4. IMMOBILIZE HEAD
working toward feet			ВОАКЪ
immobilization, beginning at shoulder and			LO LHE FONG SLINE
Strap and secure body to board ensuring spinal	.A		3. IMMOBILIZE BODY
Place padding as needed under torso	C.		SPINE BOARD
Place padding as needed under the head	B.		PATIENT AND LONG
Select and use appropriate padding	Α.		7. PAD VOIDS BETWEEN
coordinated moves keeping spine in alignment			
Slide patient into proper position using smooth	I		
laniqs timil of shorthern gais an initial frameworm			
First Aid Provider at head while holding in-line			
Place patient onto the board at command of the	'т т	_	
top of board beyond top of head	H.		
Place long spine board next to the patient with	C.		
qoue			
Quickly assess posterior body, if not already	E.		
Providers			SPINE BOARD
head, roll patient onto side toward First Aid			ONTO THE LONG
Upon command of First Aid Provider at the	E.		1. MOVE THE PATIENT
on same side			
Other First Aid Provider position themselves	D.		
Other First Aid Provider control movement of the rest of body			
movement of the patient	C.		
First Aid Provider at the head directs the	B.		
end spine	4		
bead and to noitszilidommi anil-ni nistnism			
tsum bash shi ta rabivor biA teri Han anO	.A		
CKILICYL SKILL			LVOCEDOKES

**AS PER WRITTEN INSTRUCTIONS: To prepare for a backboard as outlined in the skill sheets, cover with a blanket and lift patient on from the floor. After the patient has been lifted from the floor, the team will be required to properly place and secure a patient or a packboard as outlined in the skill sheets, cover with a blanket and lift patient from the floor.

verbalize - "transporting patient".

2023 Post 7 Mine Rescue First Aid Judges Packet

Field:

Team Number:

Team Name: