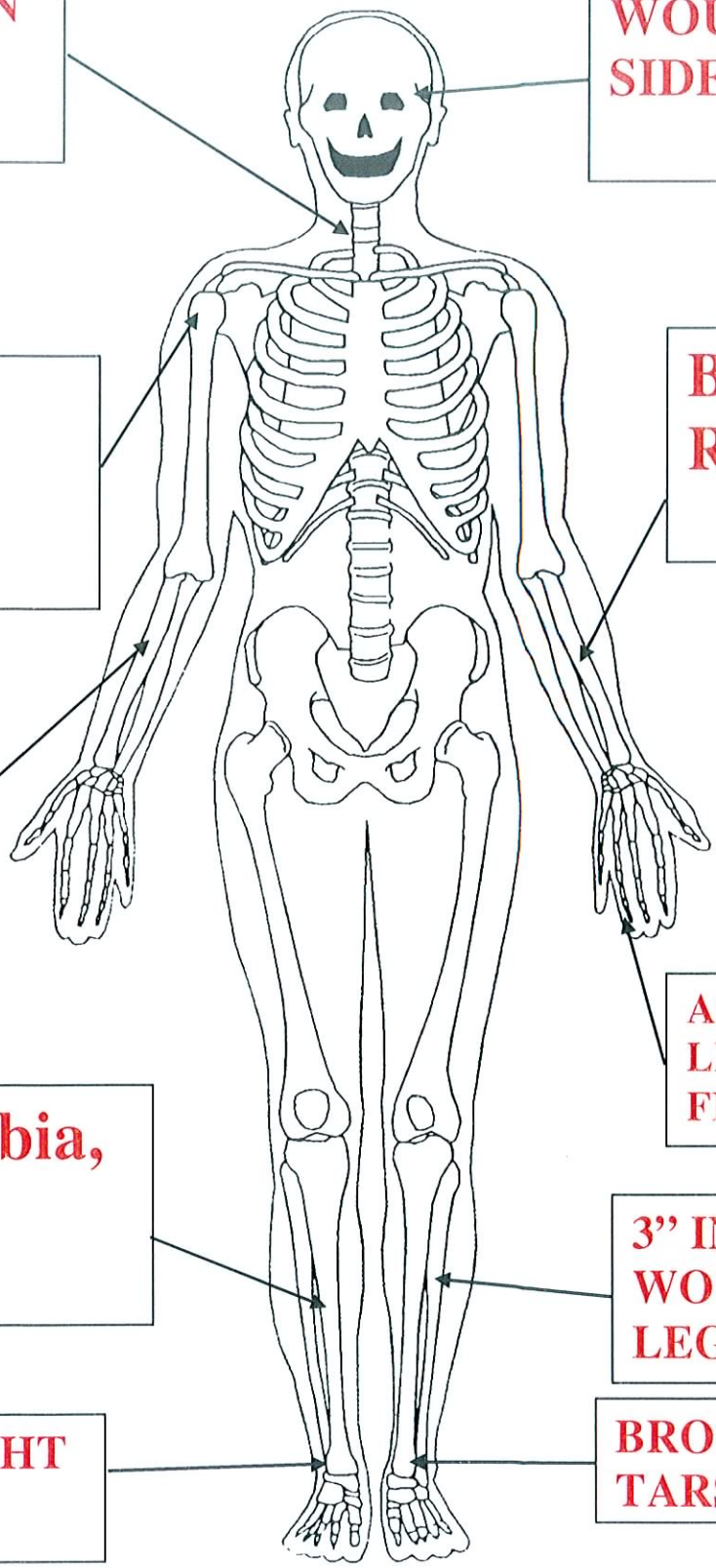
Post #6

2016

First Aid Problem

You and your first aid partner have been called to an accident at the prep plant. Employee Jim Bob was working on the top floor where he screamed out while falling to the bottom floor, "My ring caught, my finger is gone!" You find Jim Bob laying on his back, unconscious, no pulse, and not breathing. Perform one set of 2-man CPR, and each contestant will do one set of A.V. Jim Bob will then have a pulse and be breathing. Treat and prepare for transportation.

Patient



MEDICAL IDENTIFICATION DEVICE (DIABETES)

4" INCH WOUND LEFT SIDE OF HEAD

DISLOCATED RIGHT SHOULDER

Broken left Radius

Broken Right Radius

AMPUTATED LEFT RING FINGER

Fractured Tibia, Right leg

3" INCH OPEN WOUND LEFT LEG

BROKEN RIGHT TARSALS

BROKEN LEFT TARSALS

2016

Post # 6

First Aid

List of injuries

- 4" inch wound on left side of head
- Medical Identification device (Diabetes)
- 3" Inch open wound Left Leg
- Broken Left Tarsals
- Fractured Tibia Right Leg
- Broken Right Tarsals
- Broken left Radius
- Amputated Left Ring Finger
- Dislocated Right Shoulder
- Broken Right Radius

TWO-RESCUER CPR (WITH SPINAL INJURY - MANIKIN ONLY)

PROCEDURES		CRITICAL SKILL
1. RESCUER 1 - ESTABLISH UNRESPONSIVENESS	□	A. Tap or gently shake shoulders
	□	*B. "Are you OK?"
	□	C. Determine unconsciousness without compromising cervical spine (neck) injury
	□	*D. "Call for help"
	□	*E. "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, which are not considered adequate (within 10 seconds)
3. RESCUER 1 - CHECK FOR CAROTID PULSE	□	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 second
	□	*C. Absence of pulse
4. RESCUER 1 - POSITION FOR COMPRESSIONS	□	A. Locate the compression point on the breastbone between the nipples
	□	B. Place the heel of one hand on sternum the compression point and the other hand on top of the first so hands are parallel
	□	C. Do not rest fingers on the chest Keep heel of your hand on chest during and between compressions
5. RESCUER 1 - DELIVER CARDIAC COMPRESSION	□	A. Give 30 compressions
	□	B. Compressions are at the rate of at least 100 per minute (30 compressions delivered within 18 seconds)
	□	C. Down stroke for compression must be on or through compression line
	□	D. Return to baseline on upstroke of compression
6. RESCUER 2 - ESTABLISH AIRWAY	□	A. Kneel at the patient's head
	□	B. Correctly execute jaw thrust maneuver

7. RESCUER 2 - VENTILATIONS BETWEEN COMPRESSIONS	□	A.	Rescuer 1 should place the barrier device (pocket mask/Shield with one way valve) on manikin (OPTION 1: When spinal injury is present, Rescuer No. 2 can hold barrier device on manikin after Rescuer No. 1 correctly places device over the mouth and nose (OPTION 2: Rescuer 1 can place the device on the manikin each time patient is ventilated
	□	B.	Rescuer 2 Gives 2 breaths 1 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 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 checks for adequate breathing or coughing
	□	D.	The rescuer giving compressions shall feel 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. CHANGING RESCUERS	□	A.	Change of rescuers shall be made in 5 seconds or less and will be completed as outlined in problem. Team must switch every 5 cycles in less than 5 seconds.
10. CHECK FOR RETURN OF PULSE	□	A.	A final pulse check will be required at the end of the last set of CPR (within 10 seconds)
	□	*B.	"Patient has a pulse."

MOUTH-TO-MASK RESUSCITATION

PROCEDURES		CRITICAL SKILL
1. ESTABLISH UNRESPONSIVENESS	□ □ □ □ □	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	□ □ □	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	□	A. Correctly execute head tilt / chin lift or jaw thrust maneuver depending on the presence of cervical spine (neck) injuries
5. VENTILATE PATIENT	□ □	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	□ □	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		CRITICAL SKILL
1. SCENE SIZE UP	□ □	*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 seconds) B. If present, control life threatening bleeding C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).

(Judges Note)

OTE: 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.

□ Teams may use the acronym "CSM" when checking circulation, sensation, and motor function.

PATIENT ASSESSMENT

PROCEDURES		CRITICAL SKILL
1. HEAD	☐	*A. Check head for DOTS: Deformities, Open wounds, Tenderness and Swelling
	☐	*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 Check
	☐	*G. the mouth for loose or broken teeth, foreign objects, swelling or injury of tongue, unusual breath odor and discoloration
2. NECK	☐	*A. Check the neck for DOTS
	☐	*B. Inspect for medical ID
3. CHEST	☐	*A. Check chest area for DOTS
	☐	*B. Feel chest for equal breathing movement on both sides
	☐	*C. Feel chest for inward movement in the rib areas during inhalations
4. ABDOMEN	☐	*A. Check abdomen (stomach) for DOTS
5. PELVIS	☐	*A. Check pelvis for DOTS
	☐	*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 DOTS
	☐ ☐	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 DOTS
	☐ ☐	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 DOTS

4 INCH OPEN WOUND ON THE LEFT SIDE OF HEAD

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES		CRITICAL SKILL
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	☐	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.

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	☐	A. Support affected limb and limit movement ▪ Do not attempt to reduce dislocations
3. SELECT APPROPRIATE SPLINT	☐	A. Select appropriate splinting method depending on position of extremity and materials available
	☐	B. Select appropriate padding material
4. PREPARE FOR SPLINTING	☐	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

5. SPLINT	☐	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
	☐	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 foot.) (Lower leg requires boards to extend from 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
	☐	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	☐	*A. Assess patient response and level of comfort

BROKEN RIGHT TARSALS

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

PROCEDURES		CRITICAL SKILL
1. CARE FOR FRACTURE	☐	*A. Assess for distal circulation, sensation, and motor function
	☐	B. Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	☐	A. Support affected limb and limit movement
	☐	B. Place three cravats (triangular bandage) under ankle/foot
	☐	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

3" INCH OPEN WOUND LEFT LEG

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES		CRITICAL SKILL
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	☐	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.

BROKEN LEFT TARSALS

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

PROCEDURES		CRITICAL SKILL
1. CARE FOR FRACTURE	□	*A. Assess for distal circulation, sensation, and motor function
	□	B. Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	□	A. Support affected limb and limit movement
	□	B. Place three cravats (triangular bandage) under ankle/foot
	□	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

DISLOCATED RIGHT SHOULDER

SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

PROCEDURES		CRITICAL SKILL
1. CARE FOR FRACTURE	□	*A. Check for distal circulation, sensation, and motor function ▪ Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	□ □ □ □ □ □	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 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
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

BROKEN RIGHT RADIUS

SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

PROCEDURES		CRITICAL SKILL
1. CARE FOR FRACTURE	☐	*A. Check for distal circulation, sensation, and motor function ▪ Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	☐ ☐ ☐ ☐ ☐ ☐	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 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
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

BROKEN LEFT RADIUS

SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

PROCEDURES		CRITICAL SKILL
1. CARE FOR FRACTURE	☐	*A. Check for distal circulation, sensation, and motor function ▪ Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	☐ ☐ ☐ ☐ ☐ ☐ ☐	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 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
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

AMPUTATED LEFT RING FINGER

Amputations

*1. Wrap in slightly moistened sterile dressing
2. Place in plastic bag or wrap in plastic
*3. Keep part cool avoid freezing
*4. Do not place in water or direct contact with ice
*5. Transport with patient
6. Label with patients name

NOTE:
Slings are required for all wounds of upper extremities, including shoulder and armpit wounds. Slings will not be required for upper extremity burns. However, if a burn and wound and/or fracture/dislocation are present on the same upper extremity, a sling shall be applied.

TWO-PERSON LOG ROLL

TWO-PERSON LOG ROLL

PROCEDURES		CRITICAL SKILL
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

IMMOBILIZATION - LONG SPINE BOARD (Backboard)

PROCEDURES		CRITICAL SKILL
1. MOVE THE PATIENT ONTO THE LONG SPINE BOARD	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	A. One First Aid Provider at the head must maintain in-line immobilization of the head and spine B. First Aid Provider at the head directs the movement of the patient C. Other First Aid Provider control movement of the rest of body D. Other First Aid Provider position themselves 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. Place long spine board next to the patient with 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
2. PAD VOIDS BETWEEN PATIENT AND LONG SPINE BOARD	☐ ☐ ☐	A. Select and use appropriate padding B. Place padding as needed under the head C. Place padding as needed under torso
3. IMMOBILIZE BODY TO THE LONG SPINE BOARD	☐	A. Strap and secure body to board ensuring spinal immobilization, beginning at shoulder and working toward feet
4. IMMOBILIZE HEAD TO THE LONG SPINE BOARD	☐ ☐	A. Using head set or place rolled towels on each side of head B. Tape and/or strap head securely to board, ensuring cervical spine immobilization
5. REASSESS	☐ ☐	*A. Reassess distal circulation, sensation, and motor function *B. Assess patient response and level of comfort

SHOCK

SHOCK

PROCEDURES		CRITICAL SKILL
1. CHECK FOR SIGNS AND SYMPTOMS OF SHOCK	☐	*A. Check for pale (or bluish) skin (in victim with dark skin examine inside of mouth and nailbeds for bluish coloration.
	☐	*B. Check for cool, clammy skin
	☐	*C. Check for weakness
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 with possible spinal injuries)
	☐	C. Elevate according to injury
	☐	*D. Reassure and calm the patient

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.

This problem was designed by ODNR employees Melvin Byers Jr. and Charles Hutton.