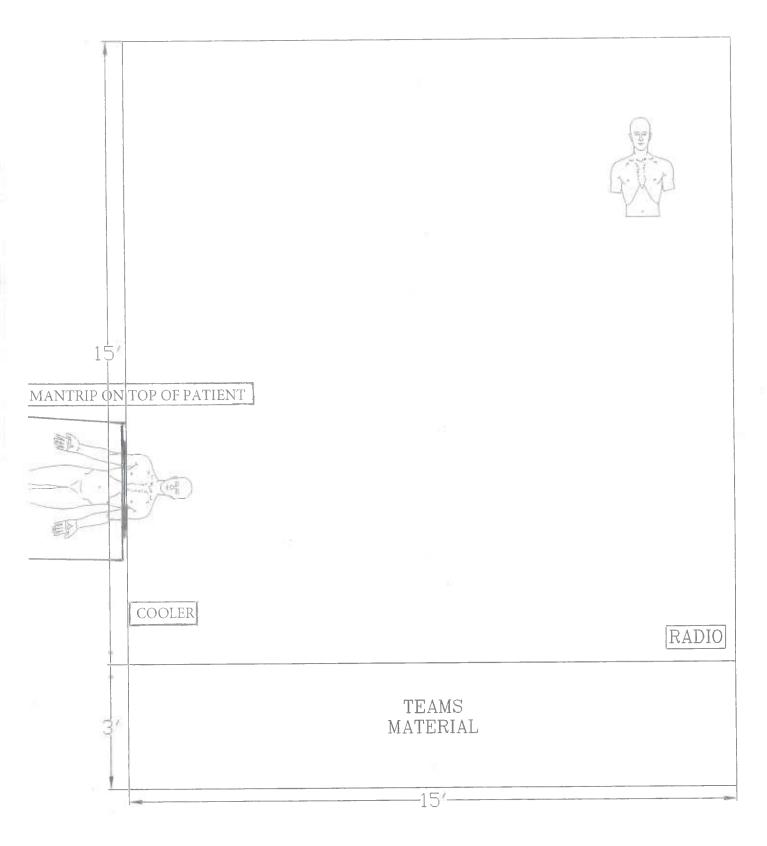
# COVE LAKE MINE RESCUE CONTEST

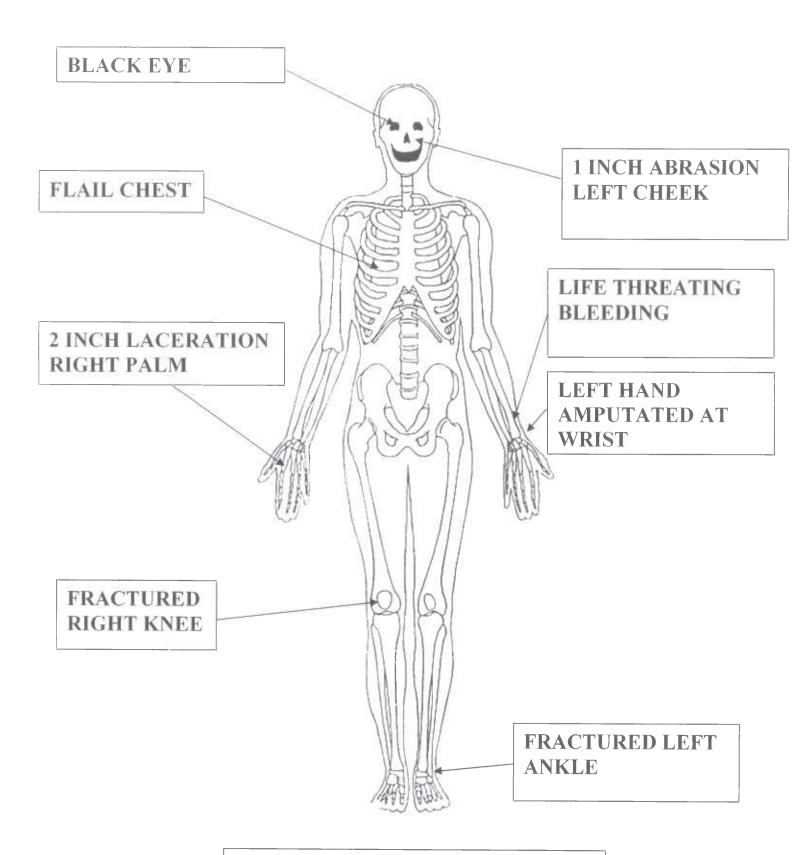


FIRST AID PROBLEM 2017

YOU AND YOUR PARTNER HAVE **BEEN DISPATCHED TO THE #5** TRACK SWITCH DUE TO AN **ACCIDENT. YOU ARRIVE ON** SCENE AND FIND JOE PINNED UNDERNEATH A DERAILED MANTRIP WITH ONLY HIS HEAD AND SHOULDERS EXPOSED. YOU HAVE JACKED UP THE MANTRIP AND BLOCKED IT INTO PLACE **GIVING YOU ENOUGH CLEARANCE** TO REMOVE JOE. PLEASE HELP JOE AND PREPARE HIM TO BE TRANSPORTED TO THE SURFACE!

# FIELD LAYOUT





**RESPIRATIONS: 6 AND SHALLOW** 

PULSE: 42

PERFUSION: <2 SECONDS

**MENTAL STATUS: UNABLE TO** 

**FOLLOW COMMANDS** 

### **SHIRT DRAG**

### PROCEDURES CRITICAL SKILL

1. POSITIONING	A. Rescuer - Kneel at the head of the patient and place one hand under each of the shoulders
2. MOVING PATIENT	A. Rescuer – Grasp shirt at the shoulder area     B. Drag patient in a straight line (keep spine as straight as possible)

TEAM MAY DO INITIAL ASSESSMENT BEFORE OR AFTER THEY SHIRT DRAG PATIENT FROM UNDER MOTOR.

THEY ONLY WAY THAT TEAM CAN PROPERLY ASSESS AND TREAT PATIENT IS TO REMOVE THEM FROM UNDER THE MANTRIP AND SHIRT DRAG IS THE PREFERRED METHOD. IF THEY DO ANYTHING DIFFERENT DOCUMENT IT AND DISCUSS WITH CHIEF JUDGE.

### **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	<ul> <li>A. Check for presence of a carotid pulse (5-10 seconds)</li> <li>B. If present, control life threatening bleeding</li> <li>C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).</li> </ul>

### JOE IS AN IMMEDIATE PATIENT

IMMEDIATE: Rapid Patient Assessment treating all life threats Load and Go. If the treatment interrupts the rapid trauma assessment, the **assessment** will be completed at the end of the **treatment**.

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.

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

# ENVELOPE #1 PATIENT IS NOT BREATHING BUT HAS WEAK PULSE

### **MOUTH-TO-MASK RESUSCITATION**

PROCEDURES CRITICAL SKILL

TROCEDURES		CRITICAL SKILL
1. ESTABLISH UNRESPONSIVENESS		<ul> <li>A. Tap or gently shake shoulders</li> <li>*B. "Are you OK?"</li> <li>C. Determine unconsciousness without compromising C-spine injury</li> <li>*D. "Call for help"</li> <li>*E. "Get AED" (Note: If AED is used, follow local protocol)</li> </ul>
2. MONITOR PATIENT FOR BREATHING	01	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 oneway 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		<ul> <li>A. After providing the required number of breaths (outlined in problem), check for return of breathing and carotid pulse within 10 seconds</li> <li>*B. "Patient is breathing and has a pulse"</li> </ul>

ENVELOPE #2 AFTER 2 MINUTES OF ARTIFICIAL VENTILATION PATIENT IS BREATHING AND HAS A PULSE

# LIFE THREATING BLEEDING LEFT WRIST

### LIFE-THREATENING BLEEDING

### **PROCEDURES**

### CRITICAL SKILL

DIRECT PRESSURE     AND ELEVATION	*A. Apply direct pressure with a gloved hand *B. Apply a dressing to wound (cover entire wound)
	*C. Elevate the extremity except when spinal injury exists
	*D. Bleeding has been controlled  *E. If controlled, bandage dressing in place
2. IF NOTIFIED THAT BLEEDING IS NOT CONTROLLED, PRESSURE POINTS SHALL BE UTILIZED	*A. Apply pressure to appropriate pressure point and notify judge verbally that bleeding is controlled (Apply pressure to blood vessels leading to area – in arm, press just below armpit; in leg, press against groin where thigh and trunk join.)  B. If controlled, bandage dressing in place
3. IF NOTIFIED THAT BLEEDING IS NOT CONTROLLED, APPLY TOURNIQUET	A. Apply as per tourniquet skill sheet

### **External Bleeding**

To Control: 1st: direct pressure

2<sup>nd</sup>: elevation & direct pressure

3<sup>rd</sup>: pressure point Last Resort: Tourniquet

# **BLEEDING IS NOT CONTROLLED UNTIL TOURNIQUET IS APPLIED**

### **TOURNIQUET**

PROCEDURES CRITICAL SKILL

	 CRITICAL SKILL
DETERMINE NEED OR USING TOURNIQUET	If these conditions are met, a tourniquet may be the only alternative:  A. Direct pressure has not been successful in stopping bleeding  B. Elevation of wound above heart has not been successful in stopping of bleeding  C. Compression of pressure point has not been successful in stopping of bleeding.
2. SELECT APPROPRIATE MATERIALS	A. Select a band that will be between 3-4 inches in width and can be wrapped six or eight layers deep for improvised tourniquet or select factory tourniquet.
3. APPLY TOURNIQUET	Factory Tourniquet A. Wrap band around the extremity proximal to the wound (one inch above but not on a joint) Improvised Tourniquet B. Apply a bandage around the extremity proximal to the wound (one inch above but not on a joint) and tie a half knot in the bandage C. Place a stick or pencil on top of the knot and tie the ends of the bandage over the stick in a square knot D. Twist the stick until the bleeding is controlled, secure the stick in position
4. APPLY PRESSURE WITH TOURNIQUET	A. Do not cover the tourniquet with bandaging material  *B. Notify other medical personnel caring for the patient
5. MARK PATIENT APPROPRIATELY	A. Mark a piece of tape on the patient's forehead "TQ" and time applied
6. REASSESS	*A. Assess level of consciousness (AVPU), respiratory status, and patient response

NO REMAINING LIFE THREATS SO TEAM SHOULD START RAPID ASSESSMENT.

### PATIENT ASSESSMENT

### PROCEDURES

### CRITICAL SKILL

1. HEAD		<ul> <li>*A. Check head for DOTS: Deformities, Open wounds, Tenderness and Swelling</li> <li>*B. Check and touch the scalp</li> <li>*C. Check the face</li> <li>*D. Check the ears for bleeding or clear fluids</li> <li>*E. Check the eyes for any discoloration, unequal pupils, reaction to light, foreign objects and bleeding</li> <li>*F. Check the nose for any bleeding or drainage</li> <li>*G. Check the mouth for loose or broken teeth, foreign objects, swelling or injury of tongue, unusual breath odor and discoloration</li> </ul>
2. NECK	<u> </u>	*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	<ul> <li>*A. Check each leg for DOTS</li> <li>B. Inspect legs for injury by touch</li> <li>C. Unresponsive: Check legs for paralysis (pinch inner side of leg on calf)</li> <li>*D. Responsive: Check legs for motion; places hand on bottom of each foot and states "Can you push against my hand?"</li> <li>*E. Check for medical ID bracelet</li> </ul>

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

# THIS COMPLETES RAPID ASSESSMENT AND TEAMS SHOULD PREPARE PATIENT FOR TRANSPORT

## IMMOBILIZATION - LONG SPINE BOARD (Backboard)

PROC	Е	D	U	R	ES
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### CRITICAL SKILL

MOVE THE PATIENT     ONTO THE LONG     SPINE BOARD	A. One First Aid Provider at the head maintain in-line immobilization of the h spine	ead and		
	B. First Aid Provider at the head dire movement of the patient C. Other First Aid Provider control m			
	the rest of body  D. Other First Aid Provider position themselves			
	□ on same side			
	E. Upon command of First Aid Providers  Providers			
	F. Quickly assess posterior body, if r done	not already		
	G. Place long spine board next to the top of board beyond top of head	patient with		
	<ul> <li>H. Place patient onto the board at confirst Aid Provider at head while himmobilization using methods to movement</li> <li>I. Slide patient into proper position</li> </ul>	nolding in-line limit spinal		
	coordinated moves keeping spine			
2. PAD VOIDS BETWEEN PATIENT AND LONG SPINE BOARD	<ul> <li>A. Select and use appropriate paddir</li> <li>B. Place padding as needed under th</li> <li>C. Place padding as needed under to</li> </ul>	ie head		
3. IMMOBILIZE BODY TO THE LONG SPINE BOARD	A. Strap and secure body to board er immobilization, beginning at show working toward feet			
4. IMMOBILIZE HEAD	A. Using head set or place rolled tow side of head	vels on each		
TO THE LONG SPINE BOARD	B. Tape and/or strap head securely board, ensuring cervical spine immobilize			
5. REASSESS	<ul> <li>*A. Reassess distal circulation, sensation motor function</li> <li>*B. Assess patient response and level</li> </ul>			
	b. Assess patient response and level	OI COMBOTT		

### **SHOCK**

#### **PROCEDURES**

### **CRITICAL SKILL**

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	<ul> <li>A. Keep victim lying down</li> <li>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)</li> <li>C. Elevate according to injury</li> <li>*D. Reassure and calm the patient</li> </ul>

**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.

PATIENT HAS UNTREATED FRACTURES SO THEY SHOULD NOT ELEVATE THE PATIENT.

TEAM SHOULD LIFT BACKBOARD AND STATE TRANSPORTING PATIENT.

ENVELOPE #3: TRANSPORTATION IS DELAYED DUE TO DERAILED SUPPLY MOTOR BLOCKING THE TRACK.

# TEAM WILL NEED TO TREAT ALL INJURIES THAT REQUIRE A TREATMENT!

### FLAIL CHEST RIGHT SIDE

### **SPLINTING - FLAIL CHEST**

PROCEDURES		CRITICAL SKILL
DETERMINE NEED FOR SPLINTING		*A. Assess for: J. Pain K. Swelling L. Deformity  *B. Determine if splinting is warranted
2. SELECT APPROPRIATE SPLINTING MATERIAL		A. Choose a pillow, blanket, trauma dressing, or other appropriate splinting material
3. PREPARE FOR SPLINTING		*A. Remove or cut away clothing as needed.  B. Cover any open wounds with sterile dressing and bandage
4. APPLY SPLINT		<ul> <li>A. Affix splint to chest with adhesive tape or roller bandage</li> <li>B. Immobilize the site of injury</li> <li>C. Use caution when taping splint to chest circumferentially</li> <li>*D. Ensure sufficient chest expansion</li> </ul>
5. REASSESS		*A. Assess patient response and level of comfort
6. ASSIST VENTILATIONS		*A. Assist with ventilation as needed

FRACTURED RIGHT KNEE AND FRACTURED LEFT ANKLE. TEAM CAN TREAT EITHER ONE FIRST BUT MUST TREAT BOTH PRIOR TO MOVING TO THE ARMS.

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

### PROCEDURE

### CRITICAL SKILL

DETERMINE NEED FOR SPLINTING	*A. Assess for: M. Pain N. Swelling O. Deformity B. Determine if splinting is warranted
2. APPLY MANUAL STABILIZATION	A. Support affected limb and limit movement B. 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

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
	patients 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 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
( DE 100700	
6. REASSESS	*A. Assess patient response and level of comfort

## OPTION FOR FRACTURED LEFT ANKLE

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

PROCEDURES	CRITICAL SKILL
1. CARE FOR	*A. Assess for distal circulation, sensation, and motor function
FRACTURE	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

# 2 INCH LACERATION ON RIGHT PALM

THEY WILL NEED TO BANDAGE THE OPEN WOUND LEFT BY THE AMPUTATION OF THE LEFT HAND AT WRIST ALSO

### DRESSINGS AND BANDAGING - OPEN WOUNDS

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

## DRESSINGS AND BANDAGING - OPEN WOUNDS

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

### **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

ENVELOPE #4: TRANSPORTATION HAS ARRIVED ON SCENE.

TEAM SHOULD SECURE PATIENT BACK TO BACKBOARD IF NOT ALREADY DONE. STATE TRANSPORTING PATIENT AND LIFT THE BACKBOARD. CLEAN THE FIELD AND STOP THE CLOCK.