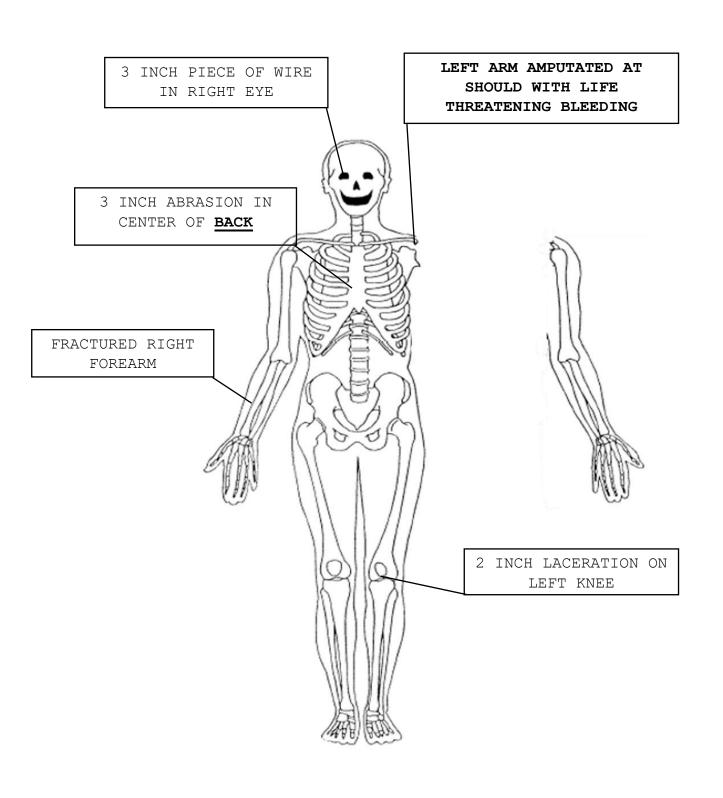
You and your partner walk to the North West Belt Tail to check on Pete. According to the tracking information that was his last known location, but he will not answer his radio or the mine phone. When you arrive at the North West Belt Tail you find Pete laying on the mine floor adjacent to the tail roller. Pete appears to be seriously injured and you notify the dispatcher that an accident has occurred. The dispatcher informs you that he has called for an ambulance and will notify you when transportation is available. Please help Pete.



#### INITIAL ASSESSMENT

#### PROCEDURES

#### CRITICAL SKILL

1. SCENE SIZE UP	*A. Observe area to ensure safety *B. Call for help
2. MECHANISM OF INJURY	<ul><li>*A. Determine causes of injury, if possible</li><li>*B. Triage: Immediate, Delayed, Minor or Deceased.</li><li>*C. Ask patient (if conscious) what happened</li></ul>
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	<ul> <li>A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver, depending on the presence of cervical spine (neck) injuries</li> <li>B. Look for absence of breathing (no chest rise and fall) or gasping, which are not considered adequate (within 10 seconds)</li> <li>C. If present, treat sucking chest wound</li> </ul>
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>

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**.

DELAYED: Detailed Patient Assessment treating all injuries and conditions and prepare for transport.

MINOR: (Can walk) Detailed Patient Assessment treating all injuries and conditions and prepare for transport. After all IMMEDIATE and DELAYED patient(s) have been treated and transported.

#### **DECEASED:** Cover

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.

## LIFE-THREATENING BLEEDING

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

CRITICAL SKILL

\*E. If controlled, bandage dressing in place

A. Apply as per tourniquet skill sheet

# **External Bleeding**

**TOURIQUET** 

2. IF NOTIFIED THAT BLEEDING IS NOT

**PROCEDURES** 

To Control: 1st: direct pressure

CONTROLLED, APPLY

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

Last Resort: Tourniquet

# **Internal Bleeding**

- \*1. Monitor breathing and pulse
- \*2. Keep patient still
- \*3. Loosen restrictive clothing
- \*4. Be alert if patient vomits
- \*5. Nothing by mouth
- \*6. Report possibility of internal bleeding as soon as EMS personnel arrive on scene

# PATIENT ASSESSMENT

# PROCEDURES

# CRITICAL SKILL

-				
1. HEAD			*A.  *B.  *C.  *D.  *E.  *F.  *G.	Check head for DOTS: Deformities, Open wounds, Tenderness and Swelling Check and touch the scalp 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 the mouth for loose or broken teeth, foreign objects, swelling or injury of tongue, unusual breath odor and discoloration
2. NECK			*A. *B.	Check the neck for DOTS Inspect for medical ID
3. CHEST			*A. *B. *C.	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			*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	R	*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

	L	R		
			*A.	Check each arm for DOTS
			В.	Inspect arms for injury by touch
			C.	Unresponsive: Check arms for paralysis (pinch inner
7. ARMS				side of wrist)
7. AIXIVIS			*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		]	J. A	CL 11 1 ( POTC
SURFACES			*A.	Check back for DOTS

# Impaled Objects in the Eye

- 1. Stabilize with 3 inch gauze or folded 4x4
- 2. Put cup (no Styrofoam) over object and allow cup to rest on roller gauze or 4x4
- 3. Secure cup with roller gauze (not over top of cup)
- \*4. Cover uninjured eye too

# Open Neck Wound (Serious or Life Threatening)

- \*1. Gloved hand over wound
- \*2. Occlusive dressing over wound- 2 inches larger than wound site
- 3. Gauze dressing over occlusive
- 4. Place roller gauze beside site and wrap around figure 8 under opposite arm

# Abdominal Injury

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

# Additional Steps for Open Abdominal Wounds (Serious or Life Threatening)

- \*1. Apply moist dressing, then an occlusive dressing
- \*2. Cover the occlusive with pads or a towel for warmth
- \*3. If an object is impaled in abs, stabilize it and do not flex legs- leave them in the position you found them.

# 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

#### **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.

#### 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	<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>

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

# **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\_

## Impaled Objects in the Cheek

- \*1. Examine; inside & outside
- 2. If end not impaled in mouth pull it out
- 3. Position head for drainage: if spinal injury, immobilize 1st and tilt board
- 4. Dress outside of wound
- \*5. Gauze on inside only if patient alert, (Simulate only in contest and state, "I would leave 3-4 inches of gauze outside of mouth.")

# SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

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

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

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

# PATIENT HAS NO PULSE AND IS NOT BREATHING DO 2 RESCUER CPR WITH AED NO SPINAL INJURY

# TW0-RESCUER CPR WITH AED (NO SPINAL INJURY - MANIKIN ONLY)

# PROCEDURES

# CRITICAL SKILL

1.	RESCUER <del>1</del> ESTABLISH	A. *B. C.	Tap or gently shake shoulders "Are you OK?"  Determine unconsciousness without compromising cervical spine (neck) injury
	UNRESPONSIVENESS	*D. *E.	"Call for help"  "Get AED" (Note: If AED is used, follow local protocol)
2.	RESCUER <b>1</b> 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	A.  B.  *C. *D.	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  Immediately starts CPR if no pulse
4.	RESCUER 1 - POSITION FOR COMPRESSIONS	A. B. C.	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 1 - DELIVER CARDIAC COMPRESSION	A. B. C. D.	Give 30 compressions Compressions are at the rate of 100 to 120 per minute (30 compressions delivered within 18 seconds) Down stroke for compression must be on or through compression line Return to baseline on upstroke of compression
6.	RESCUER 4 - ESTABLISH AIRWAY	A. B.	Kneel at the patient's side near the head Correctly execute head-tilt/ chin-lift maneuver

7.	RESCUER 4 - VENTILATIONS BETWEEN COMPRESSIONS	A. B. C.	Place barrier device (pocket mask/shield with one way valve) on manikin Give 2 breaths 1 second each Each breath - minimum of .8 (through .7 liter line on new manikins) 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. B. C. D. F.	Provide 5 cycles of 30 chest compressions and 2 rescue breaths  To check for pulse, stop chest compressions for no more than 10 seconds after the first set of CPR  Rescuer at patient's head maintains airway and checks for adequate breathing or coughing  The rescuer at the patient's head shall feel for a carotid pulse  If no signs of circulation are detected, continue chest compressions and breaths and check for signs of circulation after each set  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.	(FIRST) RESCUER APPLIES THE AED (DURING THE FIFTH CYCLE OF COMPRESSIONS)	А. В.	Second-Rescuer continues compressions while First other rescuer turns (simulated) on AED and applies pads.  RESCUERS SWITCH-First rescuer clears victim, allowing AED to analyze. (Judges shall provide an envelope indicating a shockable or non-shockable rhythm)  If AED indicates a shockable rhythm, first rescuer clears victim again and delivers shock. *verbalize shock given
10.	RESUME HIGH QUALITY CPR	A. B.	First Rescuer gives 30 compressions immediately after shock delivery (2 cycles). First Other rescuer successfully delivers 2 breaths.
11.	CHANGING RESCUERS	A.	Change of rescuers shall be made in 5 seconds or less and will be completed as outlined in the problem.  Team must switch every 5 cycles in less than 5

	seconds.
12. CHECK FOR RETURN OF PULSE	<ul><li>A. After providing required CPR (outlined in problem), check for return of pulse (within 10 seconds)</li><li>*B. "Patient has a pulse."</li></ul>

# **SHOCKABLE**

# RHYTHM

# TWO-PERSON LOG ROLL

1. STABILIZE HEAD	*A. Stabilize the head and neck
2. PREPARING THE PATIENT	<ul> <li>A. When placing patient on board place board parallel to the patient</li> <li>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</li> </ul>
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	<ul> <li>A. While stabilizing the head, roll the patient toward the rescuer by pulling steadily and evenly at the shoulder and pelvis areas</li> <li>B. The head and neck should remain on the same plane as the torso</li> <li>C. Maintain stability by holding patient with one hand and placing board (if used) with other</li> <li>D. Roll the body as a unit onto the board (if used) (board may be slanted or flat)</li> <li>E. Place the arm alongside the body</li> </ul>

#### DRESSINGS AND BANDAGING - OPEN WOUNDS

#### PROCEDURES

#### CRITICAL SKILL

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>

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

# **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

## Impaled Objects in the Cheek

- \*1. Examine; inside & outside
- 2. If end not impaled in mouth pull it out
- 3. Position head for drainage: if spinal injury, immobilize 1st and tilt board
- 4. Dress outside of wound
- \*5. Gauze on inside only if patient alert, (Simulate only in contest and state, "I would leave 3-4 inches of gauze outside of mouth.")

# IMMOBILIZATION - LONG SPINE BOARD (Backboard)

TROCEDURES	CRITICAL SIGEE
1. MOVE THE PATIENT ONTO THE LONG SPINE BOARD	A. Rescuer One at the head must maintain in-line
	immobilization of the head and spine  B. Rescuer One at the head directs the movement
	of the patient  C. Other-Rescuers control movement of the rest of
	<ul><li>body</li><li>D. Rescuer Two position themselves on same side</li><li>E. Upon command of Rescuer One at the head, roll</li></ul>
	patient onto side toward Rescuer Two.  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 Rescuer 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	A. Select and use appropriate padding
PATIENT AND LONG	B. Place padding as needed under the head
SPINE BOARD	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**

PROCEDURES	CRITICAL SKILL		
CHECK FOR SIGNS     AND SYMPTOMS OF     SHOCK	status; low ble breath with d nailbee *B. Check and na	restlessness; anxiety; altered mental increased heart rate; normal to slightly cod pressure; mildly increased ing rate; pale (or bluish) skin (in victim ark skin examine inside of mouth and ds for bluish coloration. for cool, moist skin; sluggish pupils; susea and vomiting. for weakness	
2. TREATMENT	B. Control C. Keep t *D. Calm a norma  E. Cover heat and not try possible F. Continu G. Do not g not give vomitir *H. Monito must be	e the ABCs are properly supported. bl external bleeding. he patient in a supine position. and reassure the patient, and maintain a l body temperature. with blanket to prevent loss of body d place a blanket under the patient. (Do to place blanket under patient with e spinal injuries) ue to monitor and support ABCs give the patient anything by mouth. Do e any fluids or food, and be alert for e. r the patient's vital signs ABCs. This e-done at least every five minutes. e and calm the patient	

# Impaled Objects in the Eye

- 1. Stabilize with 3 inch gauze or folded 4x4
- 2. Put cup (no Styrofoam) over object and allow cup to rest on roller gauze or 4x4
- 3. Secure cup with roller gauze (not over top of cup)
- \*4. Cover uninjured eye too

#### Open Neck Wound (Serious or Life Threatening)

- \*1. Gloved hand over wound
- \*2. Occlusive dressing over wound- 2 inches larger than wound site
- 3. Gauze dressing over occlusive
- 4. Place roller gauze beside site and wrap around figure 8 under opposite arm

# **Abdominal Injury**

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

# Additional Steps for Open Abdominal Wounds (Serious or Life Threatening)

- \*1. Apply moist dressing, then an occlusive dressing
- \*2. Cover the occlusive with pads or a towel for warmth
- \*3. If an object is impaled in abs, stabilize it and do not flex legs- leave them in the position you found them.

#### 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

# **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:

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