

Harlan County Safety Days

July 22 – 24, 2014

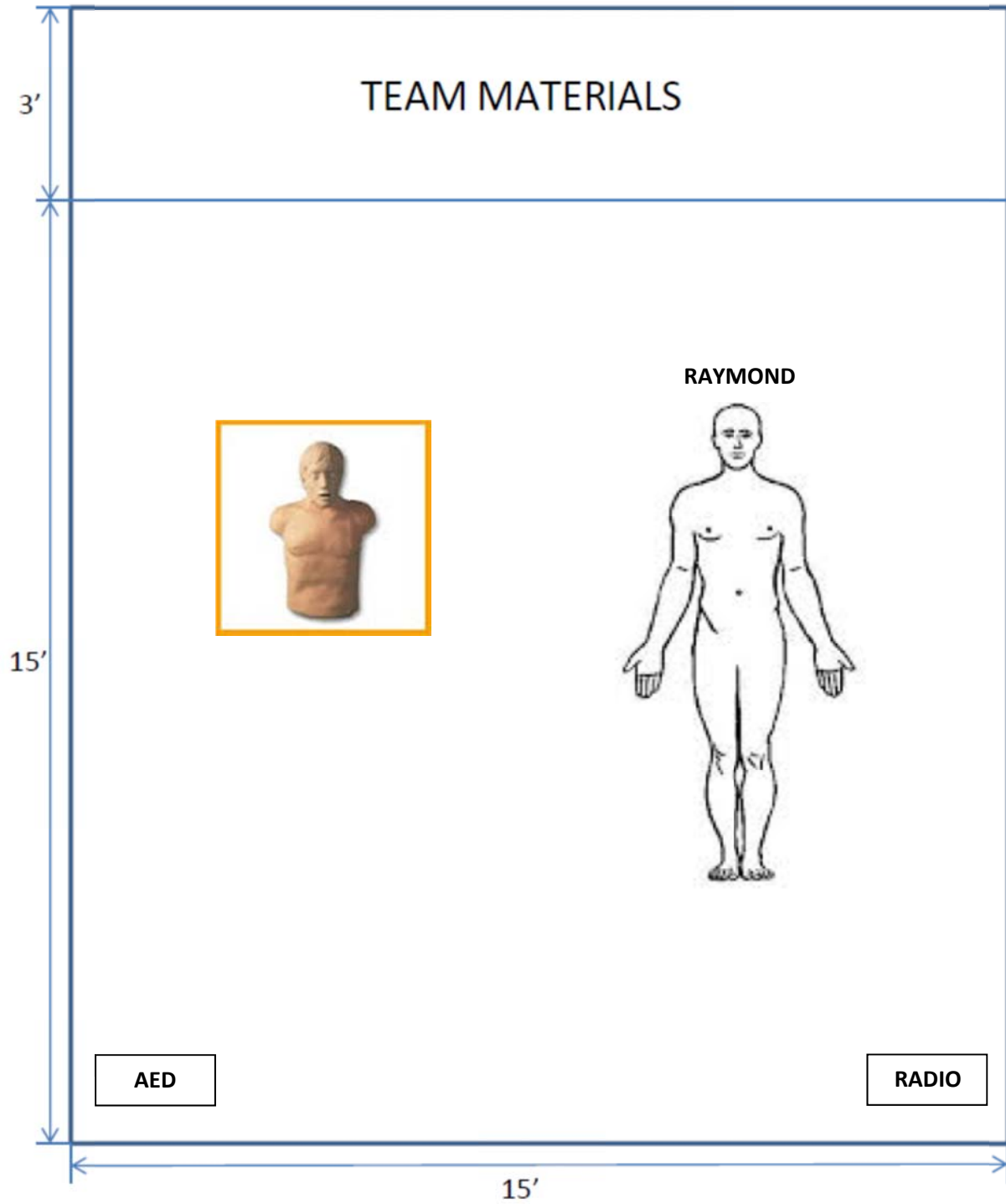


First Aid Problem

PROBLEM

ON A FRIDAY AFTERNOON, YOU AND YOUR PARTNER ARE AT THE MINE RESCUE STATION CONDUCTING YOUR MONTHLY PRACTICE WHEN CARLOS COMES RUSHING IN. CARLOS IS FRANTIC AND EXPLAINS THAT HE AND RAYMOND WERE IN THE MINE OFFICE CHANGING OUT LIGHT BULBS WHEN RAYMOND SUDDENLY COLLAPSED AND FELL TO THE FLOOR. CARLOS STATED THAT RAYMOND WAS ON A LADDER ABOUT 3 FEET OFF THE FLOOR WHEN HE COLLAPSED. CARLOS SHOOK RAYMOND AND ATTEMPTED TO SEE IF HE WAS ALRIGHT BUT RECEIVED NO RESPONSE FROM RAYMOND. YOU ARE PERSONALLY FAMILIAR WITH RAYMOND AND KNOW THAT HE IS IN HIS MID 40'S, HAS A HISTORY OF HIGH BLOOD PRESSURE, HAS PREVIOUSLY HAD STINTS PLACED, AND HAS A FAMILY HISTORY OF HEART ATTACK. CARLOS QUICKLY TAKES YOU TO WHERE RAYMOND IS LOCATED AND SAYS HE IS GOING TO THE FRONT GATE TO WAIT FOR EMS TO ARRIVE. PLEASE CALL FOR HELP AND HELP RAYMOND AS BEST AS YOU CAN AND PREPARE HIM FOR TRANSPORT.

FIELD LAYOUT



RAYMOND

ABRASION RIGHT SIDE
ABOVE EAR

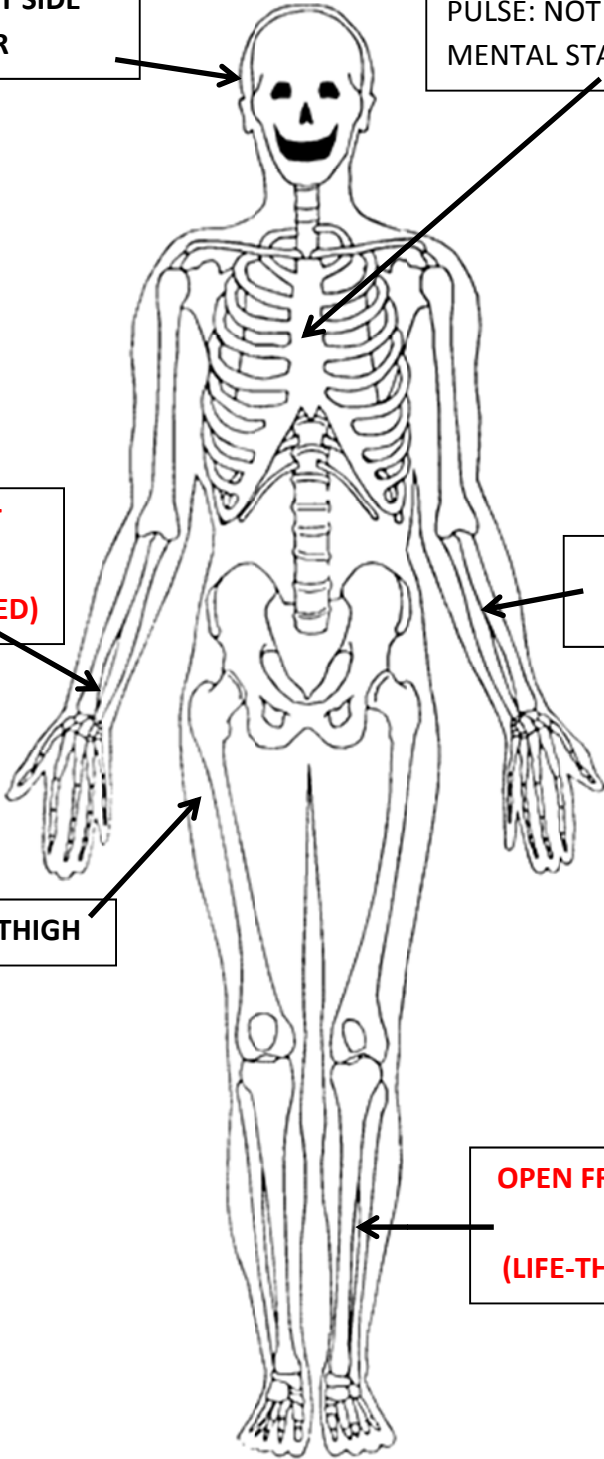
RESPIRATIONS: 3 to 4/MIN
PERFUSION: > 2 SECONDS
PULSE: NOT PALPABLE
MENTAL STATUS: UNRESPONSIVE

3" LACERATION RIGHT
WRIST
(LIFE-THREATENING BLEED)

CLOSED FRACTURE ULNA
LEFT ARM

CONTUSION RIGHT THIGH

OPEN FRACTURE TIBIA LEFT
LEG
(LIFE-THREATENING BLEED)



LIST OF INJURIES

ABRASION RIGHT SIDE ABOVE EAR

CONTUSION RIGHT THIGH

**OPEN FRACTURE TIBIA LEFT LEG (LIFE-
THREATENING BLEED)**

**3" LACERATION RIGHT WRIST (LIFE-
THREATENING BLEED)**

CLOSED FRACTURE ULNA LT ARM

INITIAL ASSESSMENT

PROCEDURES	CRITICAL SKILL	
1. SCENE SIZE UP	<input type="checkbox"/> <input type="checkbox"/>	*A. Observe area to ensure safety *B. Call for help
2. MECHANISM OF INJURY	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	*A. Determine causes of injury, if possible *B. Triage: Immediate, Delayed, Minor or Deceased. *C. Ask patient (if conscious) what happened
3. INITIAL ASSESSMENT	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	*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	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	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

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.

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

PROCEDURES	CRITICAL SKILL	
1. RESCUER 1 - ESTABLISH UNRESPONSIVENESS	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	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)

AUTOMATED EXTERNAL DEFIBRILLATOR

PROCEDURES		CRITICAL SKILL
1. ASSESSES	<input type="checkbox"/> <input type="checkbox"/>	*A. Check for response *B. Checks for no breathing or no normal breathing, only gasping (5-10 seconds)
2. ACTIVATE	<input type="checkbox"/>	*A. Emergency response system
3. CHECKS FOR PULSE	<input type="checkbox"/>	*A. No more than 10 seconds
4. GIVES HIGH-QUALITY CPR	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Correct compression hand placement Adequate Rate: At least 100/min. (i.e., delivers each set of 30 chest compressions in 18 seconds or less) B. C. Adequate Depth: Delivers compressions at least 2 inches in depth (at least 23 out of 30) D. Allows complete chest recoil (at least 23 out of 30) E. Minimizes interruptions: Gives 2 breaths with pocket mask in less than 10 seconds
5. SECOND RESCUER ARRIVES WITH AED (DURING FIFTH SET OF COMPRESSIONS)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. First rescuer continues compressions while second rescuer turns on AED and applies pads *B. RESCUERS SWITCH - First rescuer clears victim, allowing AED to analyze GIVE TEAM ENVELOPE #1 STATING "SHOCK ADVISED" *C. If AED indicates a shockable rhythm, first rescuer clears victim again and delivers shock.
6. RESUME HIGH-QUALITY CPR	<input type="checkbox"/> <input type="checkbox"/>	A. Second rescuer gives 30 compressions immediately after shock delivery (2 cycles) B. First rescuer successfully delivers 2 breaths GIVE TEAM ENVELOPE #2 STATING "PATIENT IS BREATHING NORMALLY AND HAS A PULSE"

INITIAL ASSESSMENT (CONT.)

5. ASSESS FOR CIRCULATION	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>A. Check for presence of a carotid pulse (5-10 seconds)</p> <p>B. If present, control life threatening bleeding</p> <p>C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).</p>
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LIFE-THREATENING BLEEDING OPEN FRACTURE TO TIBIA OF LT LEG

PROCEDURES	CRITICAL SKILL
1. DIRECT PRESSURE AND ELEVATION	<input type="checkbox"/> *A. Apply direct pressure with a gloved hand <input type="checkbox"/> *B. Apply a dressing to wound (cover entire wound) and continue to apply direct pressure <input type="checkbox"/> *C. Elevate the extremity except when spinal injury exists <p style="text-align: center; color: red;">GIVE ENVELOPE #3 STATING "BLEEDING HAS BEEN CONTROLLED"</p> <input type="checkbox"/> *D. Bleeding has been controlled <input type="checkbox"/> *E. If controlled, bandage dressing in place

External Bleeding

To Control: 1st: direct pressure
 2nd: elevation & direct pressure
 3rd: pressure point
 Last Resort: Tourniquet

DRESSINGS AND BANDAGING - OPEN WOUNDS
OPEN FRACTURE TO TIBIA OF LT LEG

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

LIFE-THREATENING BLEEDING
3" LACERATION TO RT WRIST

PROCEDURES	CRITICAL SKILL
2. DIRECT PRESSURE AND ELEVATION	<input type="checkbox"/> *F. Apply direct pressure with a gloved hand <input type="checkbox"/> *G. Apply a dressing to wound (cover entire wound) and continue to apply direct pressure <input type="checkbox"/> *H. Elevate the extremity except when spinal injury exists <p style="text-align: center;">GIVE ENVELOPE #4 STATING "BLEEDING HAS BEEN CONTROLLED"</p> <input type="checkbox"/> *I. Bleeding has been controlled <input type="checkbox"/> *J. If controlled, bandage dressing in place

External Bleeding

To Control: 1st: direct pressure
 2nd: elevation & direct pressure
 3rd: pressure point
 Last Resort: Tourniquet

DRESSINGS AND BANDAGING - OPEN WOUNDS

3" LACERATION TO RT WRIST

PROCEDURES	CRITICAL SKILL	
4. EMERGENCY CARE FOR AN OPEN WOUND	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	*E. Control bleeding *F. Prevent further contamination *G. Bandage dressing in place after bleeding has been controlled *H. Keep patient lying still
5. APPLY DRESSING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	E. Use sterile dressing F. Cover entire wound G. Control bleeding H. Do not remove dressing
6. APPLY BANDAGE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	G. Do not bandage too tightly. H. Do not bandage too loosely. I. Do not leave loose ends. J. Cover all edges of dressing. K. Do not cover tips of fingers and toes, unless they are injured. L. Bandage from the bottom of the limb to the top (distal to proximal) if applicable.

PATIENT ASSESSMENT

PROCEDURES			CRITICAL SKILL
1. HEAD	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		*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 *G. Check the mouth for loose or broken teeth, foreign objects, swelling or injury of tongue, unusual breath odor and discoloration
2. NECK	<input type="checkbox"/> <input type="checkbox"/>		*A. Check the neck for DOTS *B. Inspect for medical ID
3. CHEST	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		*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	<input type="checkbox"/>		*A. Check abdomen (stomach) for DOTS
5. PELVIS	<input type="checkbox"/> <input type="checkbox"/>		*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 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	*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 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	*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	<input type="checkbox"/>		*A. Check back for DOTS

IMMOBILIZATION - LONG SPINE BOARD (Backboard)

PROCEDURES	CRITICAL SKILL
1. MOVE THE PATIENT ONTO THE LONG SPINE BOARD	<ul style="list-style-type: none"> <input type="checkbox"/> A. One First Aid Provider at the head must maintain in-line immobilization of the head and spine <input type="checkbox"/> B. First Aid Provider at the head directs the movement of the patient <input type="checkbox"/> C. Other First Aid Provider control movement of the rest of body <input type="checkbox"/> D. Other First Aid Provider position themselves on same side <input type="checkbox"/> E. Upon command of First Aid Provider at the head, roll patient onto side toward First Aid Providers <input type="checkbox"/> F. Quickly assess posterior body, if not already done <input type="checkbox"/> G. Place long spine board next to the patient with top of board beyond top of head <input type="checkbox"/> 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 <input type="checkbox"/> I. Slide patient into proper position using smooth coordinated moves keeping spine in alignment
2. PAD VOIDS BETWEEN PATIENT AND LONG SPINE BOARD	<ul style="list-style-type: none"> <input type="checkbox"/> A. Select and use appropriate padding <input type="checkbox"/> B. Place padding as needed under the head <input type="checkbox"/> C. Place padding as needed under torso
3. IMMOBILIZE BODY TO THE LONG SPINE BOARD	<ul style="list-style-type: none"> <input type="checkbox"/> 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	<ul style="list-style-type: none"> <input type="checkbox"/> A. Using head set or place rolled towels on each side of head <input type="checkbox"/> B. Tape and/or strap head securely to board, ensuring cervical spine immobilization
5. REASSESS	<ul style="list-style-type: none"> <input type="checkbox"/> *A. Reassess distal circulation, sensation, and motor function <input type="checkbox"/> *B. Assess patient response and level of comfort

SHOCK

PROCEDURES	CRITICAL SKILL
1. CHECK FOR SIGNS AND SYMPTOMS OF SHOCK	<input type="checkbox"/> *A. Check for pale (or bluish) skin (in victim with dark skin examine inside of mouth and nailbeds for bluish coloration. <input type="checkbox"/> *B. Check for cool, clammy skin <input type="checkbox"/> *C. Check for weakness
2. TREATMENT	<input type="checkbox"/> A. Keep victim lying down <input type="checkbox"/> 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) <input type="checkbox"/> C. Elevate according to injury <input type="checkbox"/> *D. Reassure and calm the 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.