First Aid Problem Price 2016

It is graveyard shift. First aid mine rescue team has arrived at the scene where Maintenance Superintendent Harry P. and Maintenance Foreman Pat C. are troubleshooting the "C" Mains belt drive controller. Harry had the cover removed on the breaker panel and when he went to adjust the breaker settings he came in contact with 220 volt energized connection. After Pat activated the emergency stop button on the controller he tripped over cables hitting his head against the controller.

Pat is conscious and has sustained multiple injuries.

Harry is unconscious and has sustained injuries due to electrical shock.

Treat and prepare for transport the wounded to the surface as quickly as possible.

Pg #1

LIST OF INJURIES Price 2016

HARRY
PERFUSION: RADIAL PULSE ABSENT
MENTAL STATUS: UNABLE TO FOLLOW COMMANDS

UNCONSCIOUS CARDIAC DISTRESS

ELECTRICAL BURN ON RIGHT HAND AND RIGHT ELBOW

PAT
RESPIRATIONS: < 30 PER MINUTE
PERFUSION: RADIAL PULSE PRESENT
MENTAL STATUS: ABLE TO FOLLOW COMMANDS

5 INCH LACERATION ON FOREHEAD

ELECTRICAL FLASH BURNS TO BOTH EYES

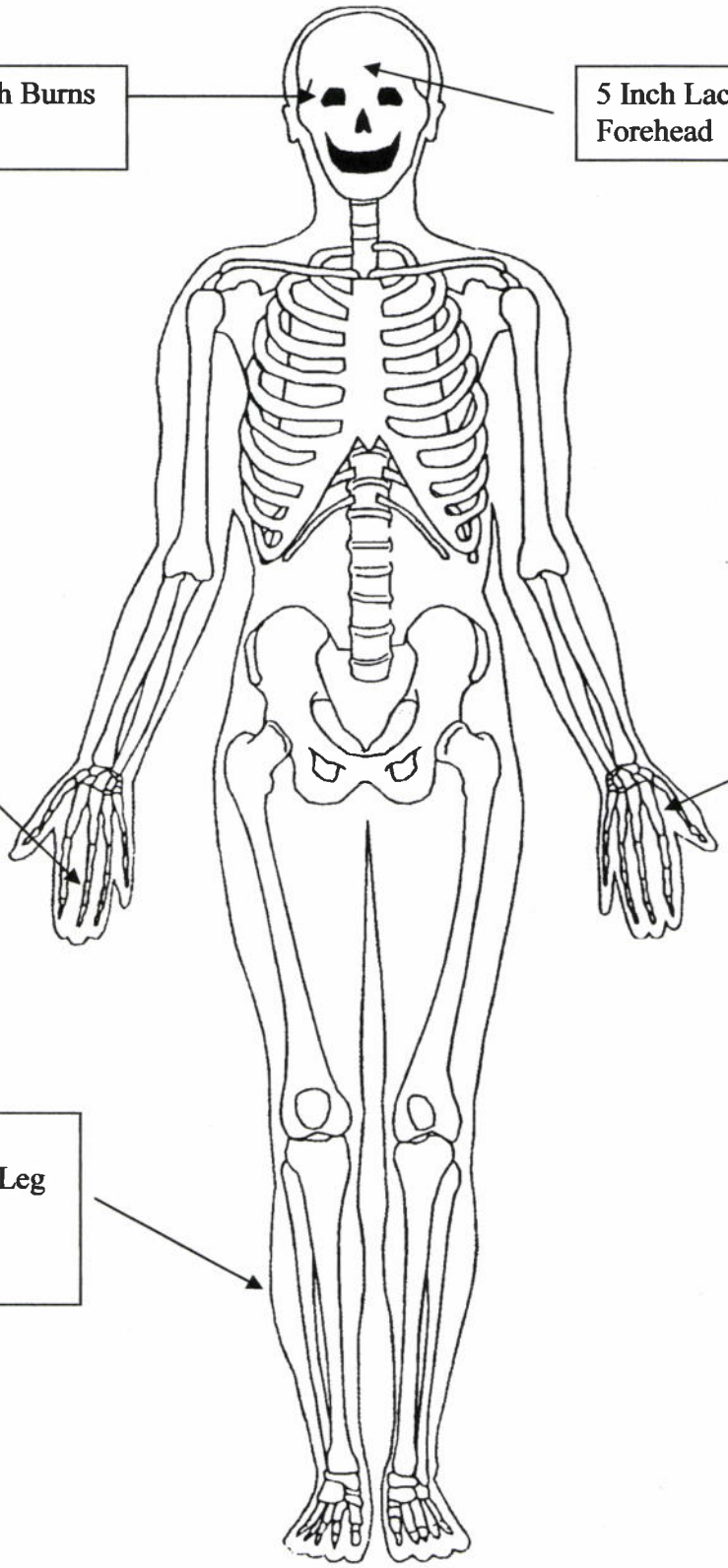
OPEN INJURY FRACTURE TO THE LOWER RIGHT FIBULA (OUTER LOWER LEG BONE)

DISLOCATED THUMB LEFT HAND

BROKEN MIDDLE FINGER RIGHT HAND

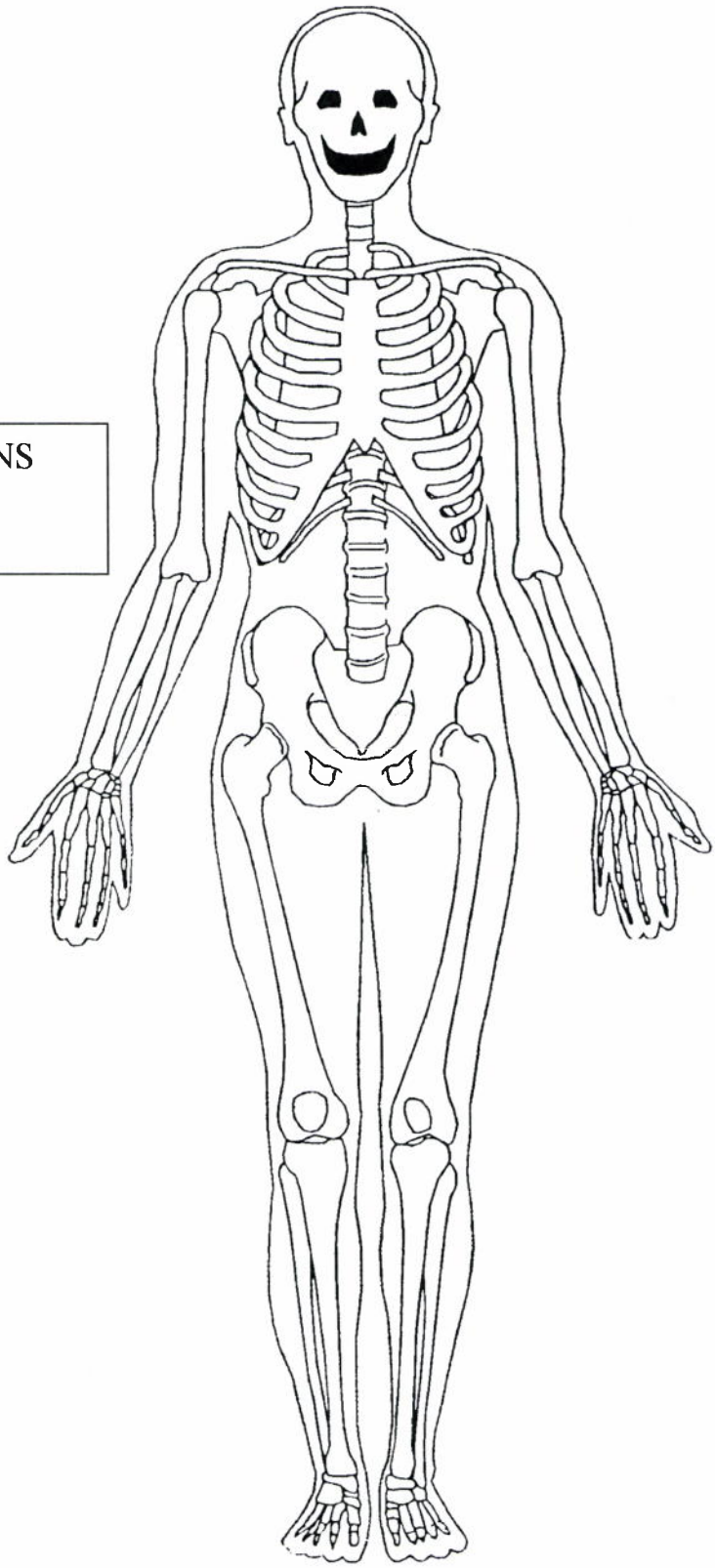
#2

PATIENT ASSESSMENT/UNCONSCIOUS



HARRY/Unconscious Cardiac Distress

ELECTRICAL BURNS
RIGHT PALM AND
RIGHT ELBOW



#4

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

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.**

HARRY

IMMEDIATE: Rapid Patient Assessment treating all life threats Load and Go. Perfusion: Radial pulse absent. Mental Status: Unable to follow commands.

PAT

DELAYED: Detailed Patient Assessment treating all injuries and conditions and prepare for transport. Respirations: < 30 per minute. Perfusion: Radial pulse present. Mental Status: Able to follow commands.

ENVELOPE #1

HARRY IS NOT BREATHING AND HAS NO PULSE. RESUSCITATE USING "AED".

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 *A. 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"

AUTOMATED EXTERNAL DEFIBRILLATOR

	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 breaths, 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 patients' 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
4.	GIVES HIGH-QUALITY CPR	□	A.	Correct compression hand placement
		□	B.	Adequate Rate: At least 100/min. (i.e., delivers each set of 30 chest compressions in 18 seconds or less)
		□	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

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5.	SECOND RESCUER ARRIVES WITH AED (DURING FIFTH SET OF COMPRESSIONS)	□ 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 (Judges shall provide an envelope indicating a shockable or non-shockable rhythm)
		□ *C.	If AED indicates a shockable rhythm, first rescuer clears victim again and delivers shock.

ENVELOPE #2
SHOCKABLE RYTHYM

6.	RESUME HIGH-QUALITY CPR	□ A.	Second rescuer gives 30 compressions immediately after shock delivery (2 cycles)
		□ B.	First rescuer successfully delivers 2 breaths

ENVELOPE #3
RESPIRATIONS: < 30 PER MINUTE. PERFUSION: RADIAL PULSE PRESENT. MENTAL STATUS: ABLE TO FOLLOW COMMANDS. TRANSPORTATION IS DELAYED.

Perform patient assessment on both Harry and Pat.
Treat all injuries.

#8

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
	☐	*G. Check 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

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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

BURNS

1. DETERMINE BURN TYPE	□	*A. Determine type ▪ Thermal ▪ Chemical ▪ Electrical
2. DETERMINE BODY SURFACE AREA	□	*A. Determine Body Surface Area (BSA) using rule of nines HARRY (9)
3. BURN CARE (All Types)	□ □ □ □ □ □ □ □	*A. Remove patient from source of burn and prevent further contamination *B. Consider the type of burn and stopping the burning process initially with water or saline if appropriate *C. Remove jewelry *D. Continually monitor the airway for evidence of closure *E. Cover the burned area with a dry sterile dressing *F. Do not use any type of ointment, lotion or antiseptic *G. Do not break blisters *H. Ensure patient does not get hypothermic
4. CARE FOR ELECTRICAL BURNS	□ □ □ □ □	*A. Ensure safety before removing patient from the electrical source *B. If the patient is still in contact with the electrical source or you are unsure, do not approach or touch the patient, contact power company *C. Monitor the patient closely for respiratory and cardiac arrest D. Treat the soft tissue injuries associated with the burn Cover both eyes *E. Look for both an entrance and exit wound
5. REASSESS	□	*A. Reassess level of consciousness (AVPU), respiratory status, and patient response