

**V.M.I.
First Aid Contest
August 8th 2013
Judge's Packet**



**V.M.I.
First Aid Contest
LIST OF INJURIES**

- **1 inch Laceration on Left Ear**

- **1st Degree (Flash) Burn on right side of face**
 - **3rd Degree Burns on Right Hand**

 - **3rd Degree Burns on Left Hand**

- **2nd Degree Burns on Both Sides of Right Arm**

- **2nd Degree Burns on Both Sides of Left Arm**
 - **Broken Tibia at Left Ankle**

Problems will be designed from the Skill Sheets approved by the Rules Committee. Teams will be required to triage the accident scene (first aid problem). Problems may have up to three patients at the scene.

Manikins will be furnished by teams for performing procedures and critical skills pertaining to all ventilation problems, cardiac arrest problems. Signal boxes on manikins will be covered or positioned so that indicators will not be visible to the team. NOTE: Live patients will **not** be used in any CPR or ventilation problems.

Under no circumstances will videotape recordings or photos be introduced as supplementary material for consideration of the appeal.

Guidelines for skills sheet discounts:

1. The team is required to call for help/call 911, once during the working of the problem. This statement must be made prior to starting triage.
2. Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted.
3. After initially stating what DOTS stands for; Deformities, Open Wounds, Tenderness, and Swelling, the team may simply state "DOTS" when making their checks.
4. After initially stating what CSM stands for; Circulation, Sensation and Motor Function, the team may simply state "CSM" when making their checks.
5. After initially stating what AVPU stands for; Alert, Verbal, Painful, Unresponsive, the team may simply state "AVPU" when making their checks.
6. If an injury requires a back board, the team may continue to the next area to be treated once all injuries not requiring the backboard have been treated or treatment started.
7. The collar for a skull fracture and/or brain injuries, will be applied after the neck has been examined and treatment completed if required.
8. Except for slings required for treatment for fractures or dislocation, slings may be applied anytime during the working of the problem prior to stopping clock. (This includes slings for fractured ribs). Factory or Triangular slings may be used. No sling required when using a full arm splint, arm should be secured to the body.

INITIAL ASSESSMENT

PROCEDURES	CRITICAL SKILL
1. SCENE SIZE UP	<input type="checkbox"/> *A. Observe area to ensure safety <input type="checkbox"/> *B. Call for help
2. MECHANISM OF INJURY	<input type="checkbox"/> *A. Determine causes of injury, if possible <input type="checkbox"/> *B. Triage: Immediate, Delayed, Minor or Deceased. <input type="checkbox"/> *C. Ask patient (if conscious) what happened
3. INITIAL ASSESSMENT	<input type="checkbox"/> *A. Verbalize general impression of the patient(s) <input type="checkbox"/> *B. Determine responsiveness/level of consciousness (AVPU) Alert, Verbal, Painful, Unresponsive <input type="checkbox"/> *C. Determine chief complaint/apparent life threat
4. ASSESS AIRWAY AND BREATHING	<input type="checkbox"/> A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver, depending on the presence of cervical spine (neck) injuries <input type="checkbox"/> B. Look for absence of breathing (no chest rise and fall) or gasping, which are not considered adequate (within 10 seconds) <input type="checkbox"/> C. If present, treat sucking chest wound
5. ASSESS FOR CIRCULATION	<input type="checkbox"/> A. Check for presence of a carotid pulse (5-10 seconds) <input type="checkbox"/> B. If present, control life threatening bleeding <input type="checkbox"/> C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).

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.

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

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

PROCEDURE		CRITICAL SKILL
1. DETERMINE NEED FOR SPLINTING	<input type="checkbox"/> <input type="checkbox"/>	*A. Assess for: <ul style="list-style-type: none"> ▪ Pain ▪ Swelling ▪ Deformity B. Determine if splinting is warranted
2. APPLY MANUAL STABILIZATION	<input type="checkbox"/>	A. Support affected limb and limit movement <ul style="list-style-type: none"> ▪ Do not attempt to reduce dislocations
3. SELECT APPROPRIATE SPLINT	<input type="checkbox"/> <input type="checkbox"/>	A. Select appropriate splinting method depending on position of extremity and materials available B. Select appropriate padding material
4. PREPARE FOR SPLINTING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	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

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

PROCEDURES	CRITICAL SKILL
1. CARE FOR FRACTURE	<ul style="list-style-type: none"> <input type="checkbox"/> *A. Assess for distal circulation, sensation, and motor function <input type="checkbox"/> B. Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	<ul style="list-style-type: none"> <input type="checkbox"/> A. Support affected limb and limit movement <input type="checkbox"/> B. Place three cravats (triangular bandage) under ankle/foot <input type="checkbox"/> C. Place pillow length wise under ankle/foot, on top of cravats (pillow should extend 6 inches beyond foot) <input type="checkbox"/> D. Lower limb, adjust cravats to tie <input type="checkbox"/> E. Tie cravats distal to proximal <input type="checkbox"/> F. Elevate with blanket or pillow <input type="checkbox"/> *G. Reassess distal circulation, sensation, and motor function

BURNS
CRITICAL SKILLS

PROCEDURES		
1. DETERMINE BURN TYPE	□	*A. Determine type <ul style="list-style-type: none"> ▪ Thermal ▪ Chemical ▪ Electrical
2. DETERMINE BODY SURFACE AREA	□	*A. Determine Body Surface Area (BSA) using rule of nines
3. BURN CARE (All Types)	□	<ul style="list-style-type: none"> □ *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 CHEMICAL BURNS	□	<ul style="list-style-type: none"> □ A. Protect yourself from exposure to hazardous materials □ B. Wear gloves, eye protection, and respiratory protection □ *C. Brush off dry powders □ *D. Consider flushing with large amounts of water □ *E. Continue flushing the contaminated area if applicable □ *F. Use caution not to contaminate uninjured areas when flushing or brushing
5. CARE FOR ELECTRICAL BURNS	□	<ul style="list-style-type: none"> □ *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 □ *E. Look for both an entrance and exit wound
6. REASSESS	□	*A. Reassess level of consciousness (AVPU), respiratory status, and patient response

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

BURNS

PROCEDURES

CRITICAL SKILLS

1. DETERMINE BURN TYPE	□	*A. Determine type <ul style="list-style-type: none"> ▪ Thermal ▪ Chemical ▪ Electrical
2. DETERMINE BODY SURFACE AREA	□	*A. Determine Body Surface Area (BSA) using rule of nines
3. BURN CARE (All Types)	□	<ul style="list-style-type: none"> □ *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 CHEMICAL BURNS	□	<ul style="list-style-type: none"> □ A. Protect yourself from exposure to hazardous materials □ B. Wear gloves, eye protection, and respiratory protection □ *C. Brush off dry powders □ *D. Consider flushing with large amounts of water □ *E. Continue flushing the contaminated area if applicable □ *F. Use caution not to contaminate uninjured areas when flushing or brushing
5. CARE FOR ELECTRICAL BURNS	□	<ul style="list-style-type: none"> □ *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 □ *E. Look for both an entrance and exit wound
6. REASSESS	□	*A. Reassess level of consciousness (AVPU), respiratory status, and patient response

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

BURNS

PROCEDURES

CRITICAL SKILLS

1. DETERMINE BURN TYPE	□	*A. Determine type <ul style="list-style-type: none"> ▪ Thermal ▪ Chemical ▪ Electrical
2. DETERMINE BODY SURFACE AREA	□	*A. Determine Body Surface Area (BSA) using rule of nines
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 CHEMICAL BURNS	□ □ □ □ □ □	A. Protect yourself from exposure to hazardous materials B. Wear gloves, eye protection, and respiratory protection *C. Brush off dry powders *D. Consider flushing with large amounts of water *E. Continue flushing the contaminated area if applicable *F. Use caution not to contaminate uninjured areas when flushing or brushing
5. 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 *E. Look for both an entrance and exit wound
6. REASSESS	□	*A. Reassess level of consciousness (AVPU), respiratory status, and patient response

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

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

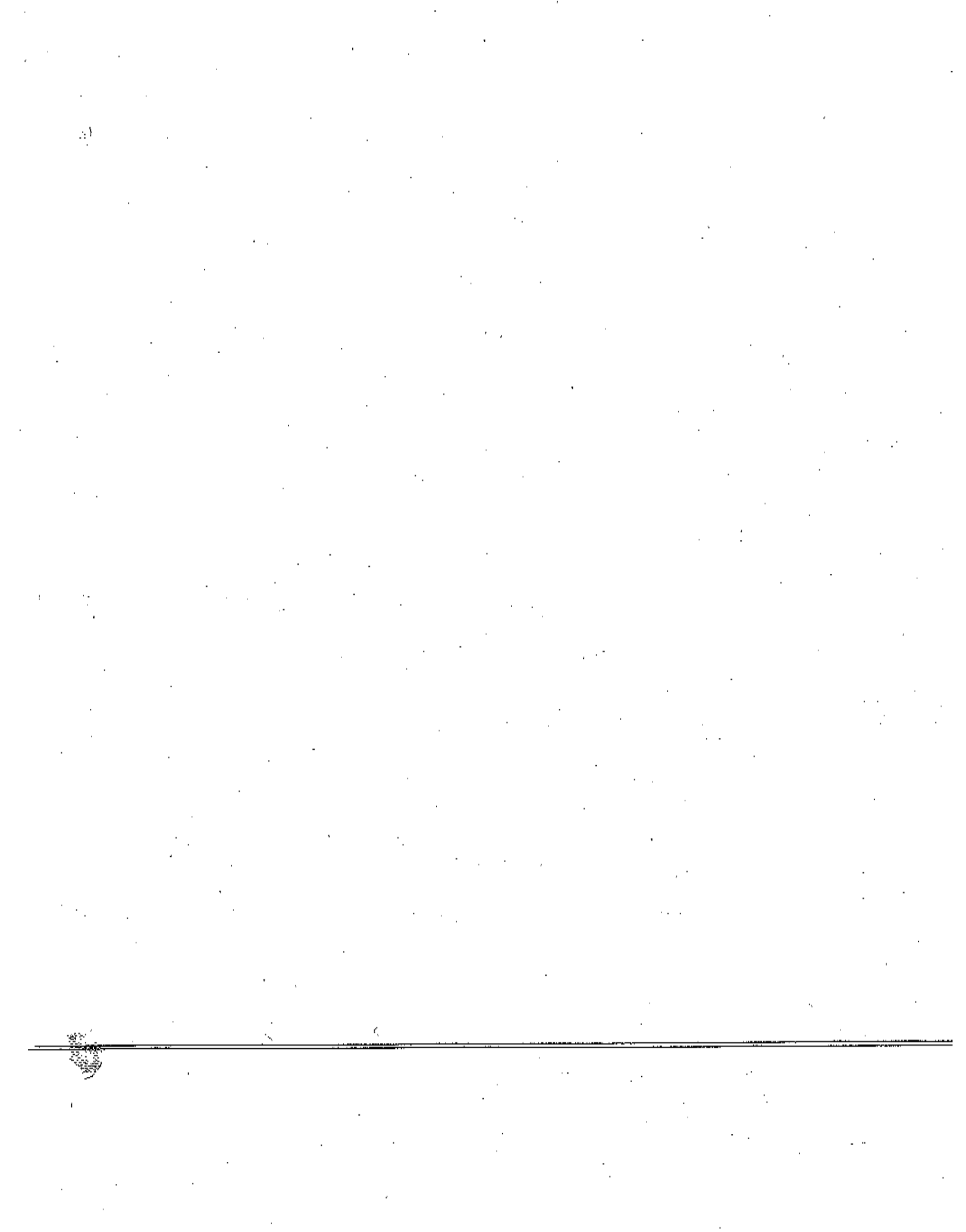
NOTE FOR JUDGES: SKILL STATION

1. The team must prepare a sample CPR tape prior to starting the clock.
2. Judges will require a signature and team number on the sample tape.
3. Explain the stop watches to the team prior to starting the clock.
4. Ensure that the stop watches are started at the same time.
5. In case of slight difference in stop watches (ex. 1 or 2 seconds) use the lesser of the two times.
6. Present the problem envelope to the team after starting the clock.
7. Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is conducted.
8. The problem consists of 3 Sets of 2 Person CPR:

Cycle = 30 compressions and 2 ventilations

Set = 5 cycles

9. Judges will require a signature and team number on the problem tape.
 10. Judges be sure and record working time.
 11. Due to the location of the skill station and field layout make sure the patient remains covered.
-



FIRST AID

SKILL STATION PROBLEM

NOTE TO TEAM:

YOUR PATIENT HAS EXPERIENCED
CARDIAC ARREST AND IS NOT BREATHING
AND DOESN'T HAVE A PULSE.

YOU ARE TO ADMINISTER 3 SETS OF 2
PERSON CPR.

AT THE COMPLETION OF 3 SETS OF CPR
THE PATIENT RESUMES BREATHING AND
HAS A PULSE.

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)
2. RESCUER 1 - MONITOR PATIENT FOR BREATHING	<input type="checkbox"/>	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	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	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 Seconds *C. Absence of pulse
4. RESCUER 2 - POSITION FOR COMPRESSIONS	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Locate the compression point on the breastbone between the nipples B. Place the heel of one hand on the compression point and the other hand on top of the first so hands are parallel. C. Do not intentionally rest fingers on the chest. Keep heel of your hand on chest during and between compressions.
5. RESCUER 2 - DELIVER CARDIAC COMPRESSION	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	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 1 - ESTABLISH AIRWAY	<input type="checkbox"/> <input type="checkbox"/>	A. Kneel at the patient's side near the head B. Correctly execute head-tilt/ chin-lift maneuver

7. RESCUER 1 - VENTILATIONS BETWEEN COMPRESSIONS	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Place barrier device (pocket mask / shield with one way valve) on manikin B. Give 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	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Provide 5 cycles of 30 chest compressions and 2 rescue breaths B. To check for 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 at the patient's head 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	<input type="checkbox"/>	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.
10. CHECK FOR RETURN OF PULSE	<input type="checkbox"/> <input type="checkbox"/>	A. After providing required CPR (outlined in problem), check for return of pulse (within 10 seconds) *D. "Patient has a pulse."

TO ASSIST JUDGES WITH COMPLETING SCORE CARDS ONLY

DO NOT TURN IN

INTERPRETATIONS OF SCORECARD B
ARTIFICIAL VENTILATION/CARDIOPULMONARY RESUSCITATION

1. Failure to determine unresponsiveness (according to Critical Skill Sheet). ___1
2. Failure to call for help. ___1
3. Failure to open airway. ___1
4. Failure to use proper maneuver to open airway (using head-tilt/chin-lift maneuver when jaw-thrust should be used, vice versa). ___1
5. Failure to assess breathlessness within 10 seconds. ___1
6. Failure to use one-way valve barrier device when ventilating manikin. ___1
7. Failure to state "get AED". ___1
8. Failure to use mouth-to-nose ventilation when required. ___1
9. Failure to keep body and head in line, if spinal injury exists. ___1
10. Failure to use tongue jaw lift, cross-finger technique, or finger sweep when required. ___1
11. Failure to reposition head when airway obstruction is suspected. ___1
12. Failure to give chest compressions when required. (airway obstruction skill sheet) ___1
13. Failure to check pulse prior to giving compressions. ___1
14. Failure to assess pulse for 5-10 seconds. ___1
15. Failure to correctly locate the carotid pulse. ___1
16. Failure to verbalize absence of pulse. ___1

Cardiopulmonary Resuscitation

1. Failure to give AV/CPR when required. ___20
(Maximum of 3 sets AV/CPR or combination thereof)
2. Failure to locate landmark for giving compressions. ___1
3. Failure to make parallel axis with heels of hands. ___1
4. Allowing fingers to rest on chest. ___1
5. Compressions. Discounts shall apply to each set.
 - a) Timing. 30 compressions shall be delivered within 18 seconds. ___1
 - b) Depth. Compression depth shall break the two lines for 60-80 pounds pressure. Over compressions shall not be discounted. ___1
 - c) Number required. A total of 30 compressions shall be made each cycle. ___1
 - d) Release of upstroke. The release line shall be straight. ___1
 - e) Rate. Compressions shall be made at the rate of (at least) 100 per minute. ___1
6. Failure to maintain hand contact with manikin when releasing pressure during compressions. ___1 (This does not apply between cycles).
7. Failure to give 2 breaths between each cycle of compressions. ___1
 - a. Timing (not completing breaths and returning 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.) ___1
 - b. Volume shall be at least .8 liters (through .7 liter line on new manikins). Over inflation shall not be discounted. ___1
8. Failure to give 5 cycles of 30 compressions and 2 breaths for each set of CPR (point of first down stroke to peak of last breath). (A cycle is 30 compressions and two (2) ventilations. A set is 5 cycles.) ___1
- ~~9. Failure to assess pulse within 10 seconds after each set of CPR. ___1 (one discount per set)~~

10. Failure to give 30 chest compressions when airway obstruction is suspected. ____1
11. Failure to perform CPR as stated in the problem. Too many or too few compressions can be detrimental to patient. ____1
12. Failure for the number of Rescuer/Rescuers to perform CPR as stated in the problem. Team performing One-Person CPR when Two-Person CPR is required and vice versa. ____3 (When problem states "Two-Rescuer CPR", two people are required to perform CPR as listed in Two-Rescuer CPR skill sheets.)
13. Failure to begin with compressions after pulse check is completed or when changing rescuers. ____1
14. Failure of rescuers to change positions in 5 seconds or less when performing two-person CPR. ____1
15. Failure of rescuer to state that patient has a pulse when CPR is completed. ____1

Artificial Ventilation

1. Failure to give artificial ventilation. _____ 20
(Maximum of 3 sets AV/CPR or combination thereof)
2. Failure to give 10-12 breaths in each 58-62-second period. ____1
(1 minute of AV = 1 set)
3. Failure to provide a breath volume of at least .8 liters (through .7 liter line on new manikins). Over inflation shall not be discounted. _____ 1
4. Failure of rescuer to check for return of breathing and pulse when artificial ventilation is completed. ____1
5. Failure of rescuer to state that patient is breathing and has a pulse when artificial ventilation is completed. ____1