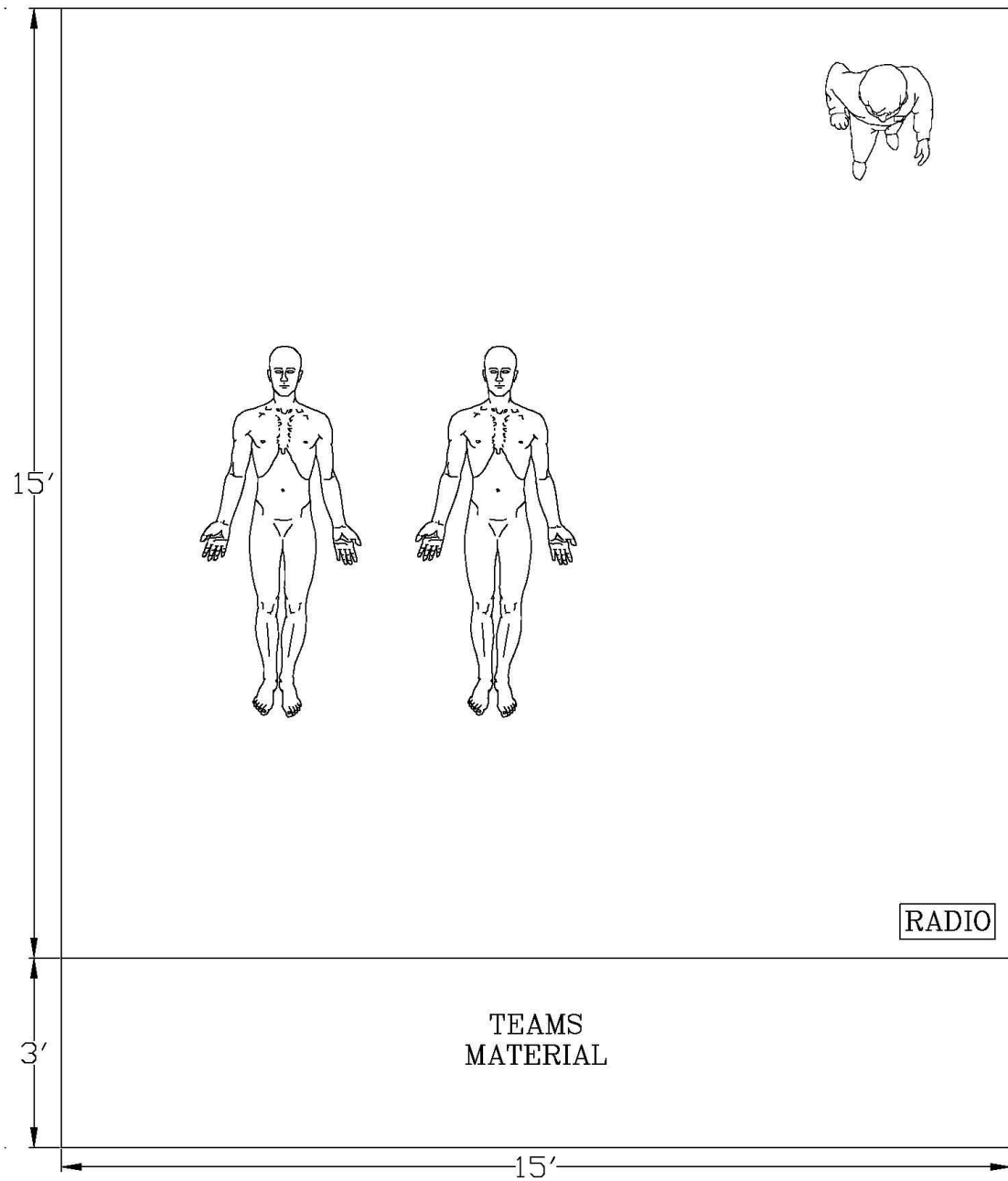
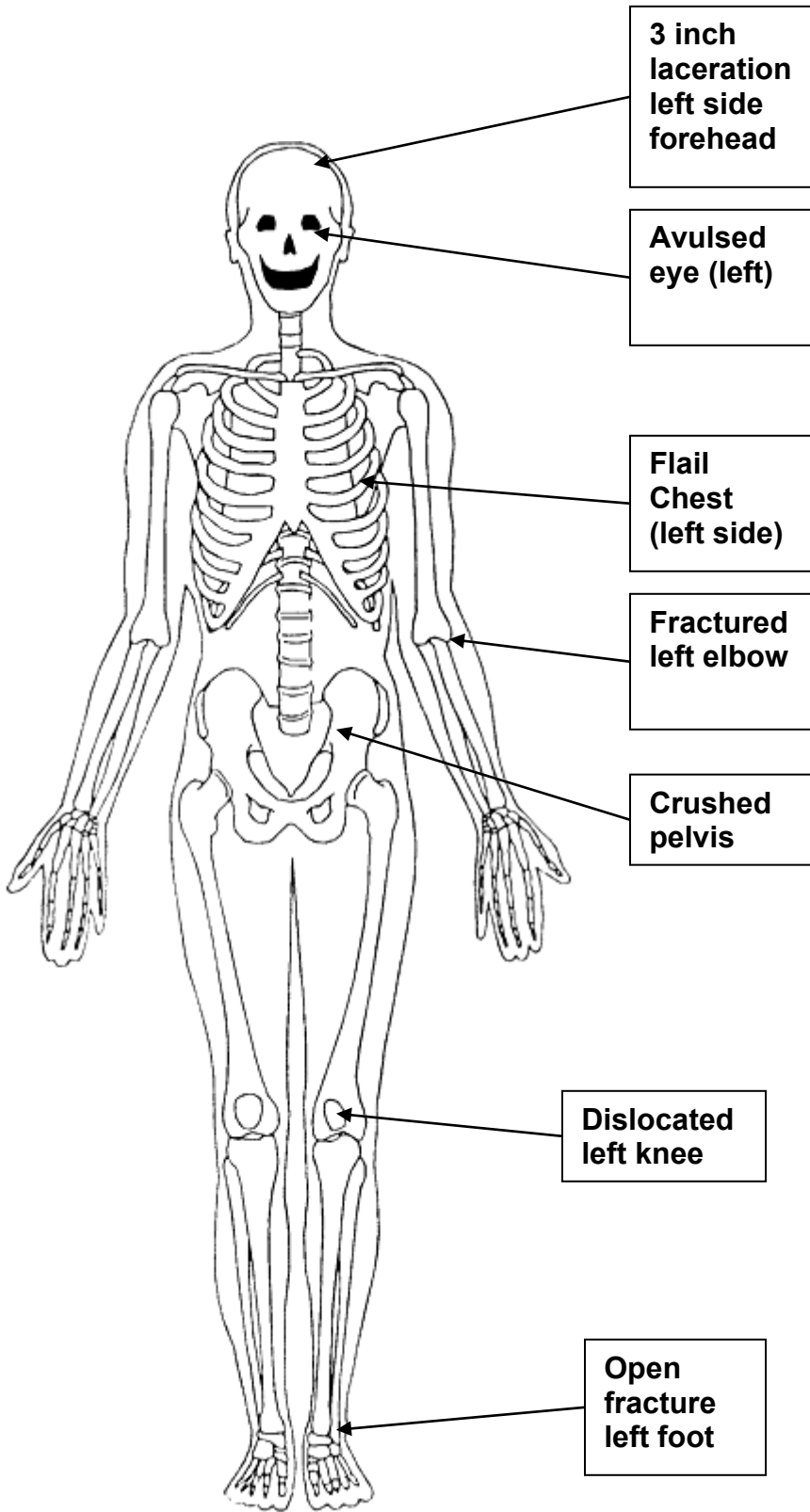


**KENTUCKY RIVER  
FIRST AID  
PROBLEM  
2012**

# FIELD LAYOUT

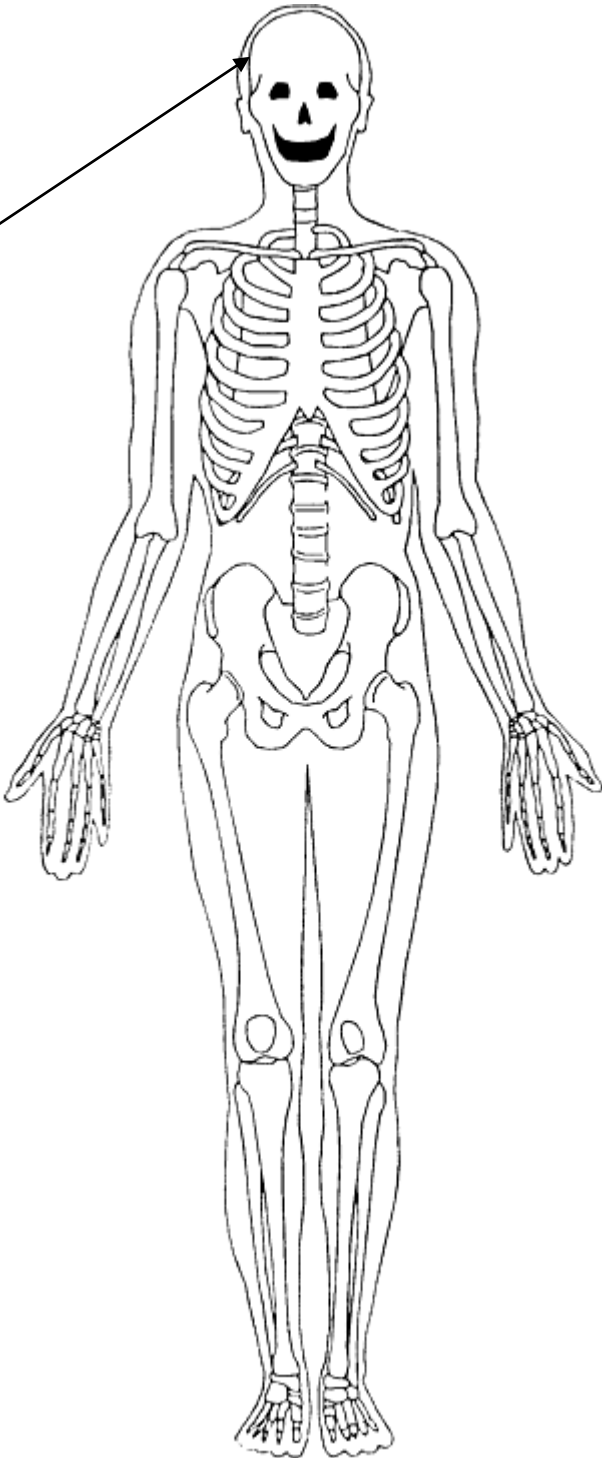


Rex



**Greg**

**Abrasion  
right side  
of head**



# **LIST OF INJURIES**

**Joe - Deceased**

**Rex - 3 inch laceration left side  
forehead**

**Avulsed eye (left)**

**Flail chest (left side)**

**Fractured left elbow**

**Crushed pelvis**

**Dislocated left knee**

**Open fracture left foot**

**Greg- Abrasion - right side of  
head**

**It's 4:00 a.m. on Tuesday morning, and the crew is leaving for the face. As the mantrip heads for the portal, Jim the section foremen holds the mantrip up while he jumps out to get his spotter. While sitting, waiting on Jim, a new truck driver swings in to the mine yard to get a load of coal. He doesn't see the mantrip sitting on the right side of the stacker belt. The truck driver starts to back toward the mantrip. He backs over the mantrip. Seeing his trailer raise up, he pulls forward. Three men appear to be injured. Joe is lying supine, Rex is lying supine and screaming for help. Greg seems to be confused as to what just happened. Please help.**

## 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

### **Greg – Immediate –**

Respirations - <30 per minute

Perfusion - <2 seconds

Mental Status – Unable to follow commands

**Teams must treat and transport first**

### **Rex – Delayed –**

Respirations - <30 per minute

Perfusion - <2 seconds

Mental Status – Able to follow commands

**Teams must treat and transport after Greg**

### **Joe – Deceased –**

Respirations – Absent

Perfusion – Absent

Mental Status - Absent

**Teams must cover before end of problem**

# Greg

1. MECHANISM OF INJURY	<input type="checkbox"/>	*A. Ask patient (if conscious) what happened
2. 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
3. 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
4. ASSESS FOR CIRCULATION	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Check for presence of a carotid pulse (5-10 seconds) B. If present, control life threatening bleeding C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).

## PATIENT ASSESSMENT

PROCEDURES			CRITICAL SKILL
1. HEAD	<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"/>	*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 (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	□	*A. Check back for DOTS
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**Team shall identify transporting by turning over to ambulance crew.**

# Rex

1. MECHANISM OF INJURY	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	*A. Ask patient (if conscious) what happened
2. 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
3. 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
4. ASSESS FOR CIRCULATION	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Check for presence of a carotid pulse (5-10 seconds) B. If present, control life threatening bleeding C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).

**Judges Note: Team should do patient assessment treating all wounds.**

## PATIENT ASSESSMENT

### PROCEDURES

### CRITICAL SKILL

9. 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
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# 3 inch laceration left side of forehead

## DRESSINGS AND BANDAGING - OPEN WOUNDS

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

# Avulsed eye (left)

## DRESSINGS AND BANDAGING - OPEN WOUNDS

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

- \*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

10. NECK	<input type="checkbox"/> <input type="checkbox"/>	*A. Check the neck for DOTS *B. Inspect for medical ID
11. 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

# Flail Chest (left side)

## SPLINTING - FLAIL CHEST

PROCEDURES		CRITICAL SKILL
1. DETERMINE NEED FOR SPLINTING	<input type="checkbox"/>  <input type="checkbox"/>	*A. Assess for: <ul style="list-style-type: none"> <li>• Pain</li> <li>• Swelling</li> <li>• Deformity</li> </ul> *B. Determine if splinting is warranted
2. SELECT APPROPRIATE SPLINTING MATERIAL	<input type="checkbox"/>	A. Choose a pillow, blanket, trauma dressing, or other appropriate splinting material
3. PREPARE FOR SPLINTING	<input type="checkbox"/> <input type="checkbox"/>	*A. Remove or cut away clothing as needed. B. Cover any open wounds with sterile dressing and bandage
4. APPLY SPLINT	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Affix splint to chest with adhesive tape or roller bandage B. Immobilize the site of injury C. Use caution when taping splint to chest circumferentially *D. Ensure sufficient chest expansion
5. REASSESS	<input type="checkbox"/>	*A. Assess patient response and level of comfort
6. ASSIST VENTILATIONS	<input type="checkbox"/>	*A. Assist with ventilation as needed

## Continue Patient Assessment

12. ABDOMEN	<input type="checkbox"/>	*A. Check abdomen (stomach) for DOTS
13. PELVIS	<input type="checkbox"/> <input type="checkbox"/>	*A. Check pelvis for DOTS *B. Inspect pelvis for injury by touch (Verbally state inspection of crotch and buttocks areas)

## Crushed Pelvis

### 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"> <li>▪ Pain</li> <li>▪ Swelling</li> <li>▪ Deformity</li> </ul> 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"> <li>▪ Do not attempt to reduce dislocations</li> </ul>
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



## Continue Patient Assessment

14. LEGS	L	R	
	<input type="checkbox"/>	<input type="checkbox"/>	*A. Check each leg for DOTS
	<input type="checkbox"/>	<input type="checkbox"/>	B. Inspect legs for injury by touch
	<input type="checkbox"/>	<input type="checkbox"/>	C. Unresponsive: Check legs for paralysis (pinch inner side of leg on calf)
	<input type="checkbox"/>	<input type="checkbox"/>	*D. Responsive: Check legs for motion; places hand on bottom of each foot and states "Can you push against my hand?"
	<input type="checkbox"/>	<input type="checkbox"/>	*E. Check for medical ID bracelet

## Dislocated left knee

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

PROCEDURE		CRITICAL SKILL
7. DETERMINE NEED FOR SPLINTING	<input type="checkbox"/>	*A. Assess for: <ul style="list-style-type: none"> <li>▪ Pain</li> <li>▪ Swelling</li> <li>▪ Deformity</li> </ul>
	<input type="checkbox"/>	B. Determine if splinting is warranted
8. APPLY MANUAL STABILIZATION	<input type="checkbox"/>	A. Support affected limb and limit movement <ul style="list-style-type: none"> <li>▪ Do not attempt to reduce dislocations</li> </ul>
9. SELECT APPROPRIATE SPLINT	<input type="checkbox"/>	A. Select appropriate splinting method depending on position of extremity and materials available
	<input type="checkbox"/>	B. Select appropriate padding material
10. PREPARE FOR SPLINTING	<input type="checkbox"/>	A. Remove or cut away clothing as needed
	<input type="checkbox"/>	*B. Assess distal circulation, sensation, and motor function
	<input type="checkbox"/>	C. Cover any open wounds with sterile dressing and bandage
	<input type="checkbox"/>	D. Measure splint
	<input type="checkbox"/>	E. Pad around splint for patient comfort



# Open fracture left foot

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

PROCEDURES		CRITICAL SKILL
1. CARE FOR FRACTURE	<input type="checkbox"/> <input type="checkbox"/>	*A. Assess for distal circulation, sensation, and motor function B. Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	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

## Continue Patient Assessment

15. 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
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

# Fractured left elbow

## SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

PROCEDURES		CRITICAL SKILL
1. CARE FOR FRACTURE	<input type="checkbox"/>	*A. Check for distal circulation, sensation, and motor function <ul style="list-style-type: none"> <li>▪ Do not attempt to reduce dislocations (if applies)</li> </ul>
2. IMMOBILIZING FRACTURE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Selection of appropriate rigid splint of proper length B. Support affected limb and limit movement C. Apply appropriate padded rigid splint against injured extremity D. Place appropriate roller bandage in hand to ensure the position of function E. Secure splint to patient with roller bandage, handkerchiefs, cravats, or cloth strips F. Apply wrap distal to proximal *G. Reassess distal circulation, sensation, and motor function
3. SECURING WITH SLING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Place sling over chest and under arm B. Hold or stabilize arm C. Triangle should extend behind elbow on injured side D. Pull sling around neck and tie on uninjured side E. Pad at the neck (except when C-Collar is present) F. Secure excess material at elbow G. Fingertips should be exposed *H. Reassess distal circulation, sensation, and motor function
4. SECURING SLING WITH SWATHE	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Use triangle cravat or factory swathe B. Swathe is tied around chest and injured arm *C. Reassess distal circulation, sensation, and motor function

### ELBOW (STRAIGHT POSITION)

Follow Procedures No. 1 and No. 2 above

**Continue Patient Assessment**

16. BACK SURFACES	<input type="checkbox"/>	*A. Check back for DOTS
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### IMMOBILIZATION - LONG SPINE BOARD (Backboard)

PROCEDURES		CRITICAL SKILL
1. MOVE THE PATIENT ONTO THE LONG SPINE BOARD	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. One First Aid Provider at the head must maintain in-line immobilization of the head and spine B. First Aid Provider at the head directs the movement of the patient C. Other First Aid Provider control movement of the rest of body D. Other First Aid Provider position themselves on same side E. Upon command of First Aid Provider at the head, roll patient onto side toward First Aid Providers 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 First Aid Provider 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 PATIENT AND LONG SPINE BOARD	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A. Select and use appropriate padding B. Place padding as needed under the head C. Place padding as needed under torso
3. IMMOBILIZE BODY TO THE LONG SPINE BOARD	<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	<input type="checkbox"/> <input type="checkbox"/>	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	<input type="checkbox"/> <input type="checkbox"/>	*A. Reassess distal circulation, sensation, and motor function *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.

Teams must lift the back board to transport.