

**OUTLINE SHEET 5.4
PRIMARY SURVEY**

ENABLING OBJECTIVES:

- 4.7 List the procedures used in a primary survey.
- 4.8 Demonstrate primary survey procedures used in a mock trauma (moulage) scenario without injury to personnel or damage to equipment.

TOPIC OUTLINE:

A. PRIMARY SURVEY PROCEDURES:

- 1. A head-to-toe examination is conducted once survivor is aboard the rescue platform .
- 2. Used to identify all life threatening injuries, which must be treated as they are found.

B. ARRIVING ON THE SCENE:

- 1. _____ - Upon approaching the scene, it is imperative that you evaluate the safety of the area in order to protect yourself and your crew.

NOTE

During in-water rescue scenarios onboard the rescue platform, it is understood that the scene is safe. However, it is necessary to evaluate the scene at all times.

- 2. _____ - Take BSI precautions prior to touching the survivor.
- 3. _____ - Attempt verbal communication with the survivor after or during BSI procedures.

C. INITIAL ASSESSMENT:

- 1. Check the Airway-
 - a. If survivor is conscious and talking to you, check for severe bleeding and begin Primary Survey.
 - b. If survivor is unconscious, open the Airway using a “modified jaw thrust.”
- 2. _____: Verify that the survivor is breathing. If not breathing, give two breaths. If unable to get the breaths in begin Obstructed Airway procedures.

NOTE

If it is necessary to perform abdominal thrusts, expose the abdominal area prior to pressing on the abdomen.

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1. _____: Verify that the survivor has a pulse. If no pulse, begin CPR procedures.
2. _____: Take a quick look at the body from head to toe identifying any severe bleeding prior to beginning CPR.

NOTE

If severe bleeding occurs during chest compressions, it may be necessary to expeditiously bandage a wound in order to continue.

D. PRIMARY SURVEY:

1. _____: While maintaining in-line stabilization of the head, sweep the back of the neck checking for blood and/or deformities. Determine the correct size c-collar needed, verify placement, and secure it. Once in place, you may let go of the head.
2. Life Threatening Injuries:
 - a. Quickly look at the head checking for severe bleeding. If no severe bleeding, move directly to the chest.
 - b. Expose the survivor’s chest and abdomen. Look for and treat all life-threatening injuries present.
 - c. Expose an arm, look for and treat all life-threatening injuries. Repeat for the other arm.
 - d. Follow the same procedure for the legs.

NOTE

Following the order of assessment, if blood-soaked clothing is identified, expose and treat that extremity first.

3. Life-threatening injuries include:
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. Abdominal Evisceration
 - f. Obvious Bruising (internal Bleeding)
 - g. Critical Burns
 - h. Head, Neck, or Spinal Injury
 - i. Heat Stroke

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- j. Severe Hypothermia
- k. Psychiatric Emergencies
- l. Severe Shock
- 4. Check Breathing- Check for equal rise and fall of the chest by resting your hands on the survivor’s chest, in the front and back. Looking for breathing quality and rate.
- 5. Check circulation- Check pulses at the wrists (radial) and at the feet (dorsalis pedis), looking for equal quality and rate. Check capillary refill in fingers and toes, looking for circulation return within 2 seconds or less. Check skin temperature by resting the back of a gloved hand on the survivor’s forehead and /or chest.
- 6. Perform Blood Sweep- Begin by wiping gloves clean or replacing them with a fresh pair.

NOTE

Do not wipe contaminated gloves on yourself.

- 7. Starting at the head, sweep under the body and inside the clothing looking for any bleeding you can’t see. If blood is found, investigate it.
- 8. _____ - Verify that survivor is still breathing and has a pulse.

E. RULES FOR SPLINTING:

- 1. _____.
- 2. When splinting legs, ensure extremities are in-line prior to applying a splint.
- 3. Ensure that the joints above and below the injury are immobilized
- 4. If an open wound or bruising is present, ensure a tie is placed above and below the area.
- 5. Tie knots across the top of the splint, not against skin.
- 6. Always check capillary refill after splinting.

F. IDENTIFICATION AND TREATMENT OF INJURIES:

- 1. Open Chest Wounds “Sucking Chest Wound”
 - a. Presentation:
 - (1) Open wound to the chest with a sucking sound during breathing
 - (2) Bleeding and bubbles coming from the chest

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(3) Exit wound may be present.

2. Treatment:

- a. Immediately place a gloved hand over the open wound to create a seal.
- b. Evaluate wound size. If wound is smaller than a petroleum gauze foil wrapper, use foil to create a one-way valve. If wound is larger, use plastic from an IV bag cut to size.
- c. Tape on three sides. Top, bottom, and side closest to the middle of the body.
- d. Check for an exit wound. If an exit wound exists, determine its size. Use a combination occlusive and field dressing placed over exit wound using survivor’s body weight to create a seal. During an overland SAR, it may be necessary to log roll the survivor to get a clear view of the injury prior to treatment.
- e. Deviated trachea is a sign that the one-way valve is no longer working.
- f. To relieve pressure, peel dressing up using un-taped side and “burp it”. May hear a rush of air as pressure is relieved.
- g. Lay survivor injured side down if feasible.

3. Closed Chest Wounds:

a. Presentation:

- (1) Difficulty breathing
- (2) Deviated trachea.

b. Treatment:

- (1) Place the survivor in an _____ shock position. Shock position is the only treatment.

4. Flail Chest:

a. Presentation:

- (1) Difficulty breathing
- (2) Section of the rib cage moving opposite of normal breathing (This is not unequal breathing).
- (3) Bruising to the chest area.

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b. Treatment:

- (1) Place a saline bag over the affected area taping the top and bottom of the bag to the chest. May use cravats if needed, but ensure that they're not too tight as to further hinder breathing.
- (2) Check for other broken ribs before placing tape.
- (3) May use a rolled up burn sheet.

5. Amputations:

a. Presentation:

- (1) Severely torn or missing limb.
- (2) May have severe bleeding present.
- (3) Limb may be fractured.

b. Treatment:

- (1) _____. Apply direct pressure with a field dressing and tightly wrap with an ACE bandage.
- (2) Splint the amputated end during the Secondary Survey. Using a SAM splint, wrap around the end of the amputation in a "U shape" and secure it with at least two ties.

6. Open Fractures:

a. Presentation:

- (1) Visible bone and/or fragments with an open wound.
- (2) Bleeding can be mild to severe.

b. Treatment:

- (1) **CONTROL BLEEDING FIRST.** Place donut-shaped gauze bandage around the exposed bone and cover with a field dressing.
- (2) If it's necessary to move an arm to control bleeding from an "open hand fracture", visualize and palpate for other injuries before moving it.

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- (3) Ensure the dressing is snug and tied on the side. Do not cross dressing ties over the wound. This will apply unwanted pressure on the exposed bones.
- (4) Splint fractures during the Secondary Survey.
 - (a) For fractures of the lower arms, use a SAM splint underneath the arm (palm side) with hand in the neutral position. Secure with at least three ties with wrist and elbow immobilized.
 - (b) For fractures of the upper arms, use a SAM splint across the outer aspect of the arm and secure with at least two ties. Utilize a sling and swathe (swathe at a minimum). Ensure the swathe is not too tight as to hinder breathing.
 - (c) To splint fractures of the hands, wrap roller gauze around the hand and wrist, to create a bulky soft splint. Avoid covering fingertips.
 - (d) For upper leg fractures, use a SAM splint across the side of the leg above the hip to below the ankle. Secure with at least five ties.
 - (e) Ensure the leg is placed in-line prior to splinting and that the hip, knee, and ankle are immobilized.
 - (f) For lower leg fractures, use a SAM splint across the side of the leg above the knee to below the foot. Secure with at least four ties.

7. Closed Fractures:

a. Presentation:

- (1) _____ may be visible.

b. Treatment:

- (1) If bruising is present, assume a bone is broken and treat as a fracture.
- (2) Some bruising may be difficult to see. A thorough Secondary Survey must be performed to identify all injuries.
- (3) Splint during Secondary Survey.

8. Abdominal Evisceration:

a. Presentation:

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(1) Open abdominal wound with internal organs visibly exposed and/or spilling out.

b. Treatment:

(1) Soak large field dressing with Normal Saline.

(2) Place the large field dressing under exposed organs and fold over the organs, covering all wound areas.

(3) Tie on the side, ensuring no pressure is placed directly on exposed organs.

9. Pelvic Fractures:

a. Presentation:

(1) Instability or grinding feeling when pressing in against the hips

(2) Grinding sounds accompanying pressing in against the pelvis.

(3) Survivor may feel like they're coming apart and survivor may be in extreme pain.

(4) Bruising to the abdominal and/or pelvic region may be present.

b. Treatment:

(1) Fold burn sheet and place it inside of the trauma sheet to fill space between the legs.

(2) Place a Triangular Bandage across the hips, two on the upper legs and two on the lower legs (applying cravats at the hips, then applying them from the feet up).

NOTE

The pelvis _____ and, if necessary, treated prior to logrolling the survivor onto the litter.

10. Penetrating Puncture Wounds:

a. Presentation:

(1) Foreign object protruding from any area of the body.

b. Treatment:

(1) Secure object with Roller Gauze on each side of the penetrating object.

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- (2) Cut a hole in the middle of a field dressing large enough for the object to fit through and apply field dressing. Tie on the side to avoid direct pressure.
- (3) Ensure object is secure and visible to personnel to prevent further penetration.

11. Puncture Wounds:

a. Presentation:

- (1) Puncture wound to any area of the body.

b. Treatment:

- (1) Place a field dressing on wound and tie over the top of the wound.
- (2) Check for an exit wound.

12. Eye Avulsion:

a. Presentation:

- (1) Eye missing or protruding from the socket

b. Treatment:

- (1) If eye is missing, cover affected side with a field dressing. Always cover both eyes to minimize movement due to sympathetic oculomotor function.
- (2) If eye is protruding from the socket, soak Roller Gauze with Normal Saline. Apply Roller Gauze to each side of the eye and cover both eyes with a field dressing.
- (3) Ensure dressing is snug and tied on the side.

13. Simple Rib Fractures:

a. Presentation:

- (1) Complaining of difficulty breathing.
- (2) Bruising, tenderness, or pain (guarding) to affected area.

b. Treatment:

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- (1) Sling and swathe the arm of injured side, if no injuries to the arm are present.

14. Severe Burns:

a. Presentation:

- (1) Signs of second and third degree burns (_____) to any area of the body.
- (2) If burns to the chest are present, check for singed nose hairs indicating an inhalation injury

b. Treatment:

- (1) Cover burned areas with a burn sheet cut to size, one sheet thick. Secure loosely with safety pins.
- (2) Lightly palpate burned areas for broken bones during Secondary Survey.

NOTE

Any sterile dressing that touches the deck or becomes contaminated, is considered useless and SHALL NOT be used.

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