



Session 2 is all about First Aid and we will review situations we may encounter as SERT ERT members.

Session 2 - Unit 3 Objectives



- 1. Identify life-threatening conditions** resulting from trauma including severe bleeding, low body temperature, and airway blockage.
- 2. Review correct** life saving techniques.
- 3. Review basic** first-aid care for non-life-threatening injuries.

PM 3-1



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Following a major disaster, we may be faced with a variety of life-threatening conditions. While we have all completed the American Red Cross Adult First Aid course, the information we will review may be helpful during an activation. We will review and discuss correct live saving techniques and how we can provide first aid care for non-life-threatening injuries. Note that none of us here are certified first aid instructors so all information shared today are OPINIONS!

Treating Life-Threatening Conditions



- Without treatment, **severe bleeding and airway obstruction** can quickly lead to death.
- The **first priority** of SERT volunteers assisting in disaster first aid operations is to attend to these conditions by controlling bleeding and positioning a patient so they can breathe.

PM 3-2



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3-3

Critical situations --SEVERE BLEEDING--you need to stop the bleed, or the person dies! If the person's airway is blocked then they cannot breathe, and the person dies! These are situations that require immediate attention and are your FIRST PRIORITY! If this help is requiring more than what you are trained to provide, call for HELP on your radio.

Safety Considerations



- Prior to treatment, **ensure that both the patient and rescuer** are in a safe environment to administer care.
- Some **questions** SERT volunteers should consider:
 - Do I feel safe at this spot?
 - Should I leave and move to a safer location, or am I able to stay and start providing care immediately?
 - If I leave, can I take anyone with me?

PM 3-2



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3-4

Before entering any situation ask yourself “IS IT SAFE?”. If the answer is NO, then don’t go. If the answer is YES, then proceed and when you find a patient ask yourself again, “IS IT SAFE?” to leave the patient here. If YES, it maybe be best not to move the patient depending on their condition. If NO, you need to decide if you can assist the patient in moving or do you need to seek assistance from another.

Approaching the Patient

- Be sure **patient can see you.**
- **Identify yourself**
 - Your name and name of your organization.
- **Request permission** to treat, if possible.
- **Respect** cultural differences.
- **Protect** patient privacy.



PM 3-2



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3-5

Back to the RED CROSS training. You always start with identifying yourself and that you are with SERT. ALWAYS ask for permission to help the patient. If the patient is unconscious permission is “assumed”.

Some cultural differences may not want you to touch or to even speak to a female without permission. Therefore, you always ask permission to help the patient.

Stages of Severe Bleeding



Stage	Blood Loss	Heart Rate	Blood Pressure	Breath Rate	Patient
I	Less than 15%	Normal (<100 bpm)	Normal	14-20	Patient appears normal
II	15%-40%	Fast (>100 bpm)	Slightly Low	20-30	Patient may feel anxious
III	30%-40%	Very Fast (>120 bpm)	Low	30-40	Patient feels confused
IV	Greater than 40%	Critical (>140 bpm)	Critical	>35	Patient feels lethargic

PM 3-3



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3-6

Bleeding can be challenging. A combination of blood loss, increased heart rate, and increased breath rate helps you identify the severity of blood loss. While we can check the heart rate via taking their pulse, we will NOT be taking someone's blood pressure.

Types of Bleeding



PM 3-3



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3-7

Of the 3-types of bleeding shown here which is the most concerning? Arterial as the blood is coming directly from the heart.

Controlling Bleeding: Direct Pressure



Step 1: Find the source(s),

Step 2: Cover the source,

Step 3: Apply pressure,

Step 4: Maintain pressure until bleeding has stopped.

PM 3-4



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3-8

We follow these 4-steps to control bleeding.

Controlling Bleeding: Tourniquets



- **Place on injured limb** as high as possible,
- **Pull strap** through buckle,
- **Twist rod** until bleeding stops/slows,
- **Secure the rod,**
- If bleeding continues, place second tourniquet.
- **Leave in place until EMS takes over.**



PM 3-4/5



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3-9

For an arterial bleed on a LIMB, you may need to apply a tourniquet. These are relatively easy to apply and once in place should only be removed by a medical professional. A best practice is to write the date and time the tourniquet was applied on the device.

Shock

- Shock is often **difficult to diagnose**.
- **Main signs of shock:**
 - Rapid and shallow breathing,
 - Capillary refill of greater than two seconds,
 - Failure to follow simple commands, such as “squeeze my hand.”
- Symptoms of shock are easily missed. **Pay careful attention** to your patient.

PM 3-5



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3-10

Shock maybe difficult to diagnose and the onset may develop over time as the patient undergoes changes. Look for rapid and shallow breathing and capillary refill greater than 2-seconds when you squeeze the patients nail on their finger or toe. A patient’s condition can change so you will need to pay careful attention for changes.

Maintaining Body Temperature



Keep the patient warm:

- **Remove** wet clothing.
- **Place something between patient and ground** (e.g., cardboard, jacket, blanket).
- **Wrap patient with dry layers** (e.g., coat, blanket, Mylar emergency blanket).
- **Shield patient** from wind.

PM 3: 5-6

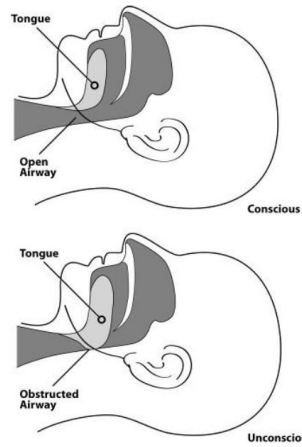


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3-11

Keeping a patient warm get helps in dealing with Shock. If the body gets cold, it can lead to shock. People should be in dry clothing. If you have a patient on the ground put something between the patient and the ground. Wrap the patient in dry layers and shield them from the wind if possible.

Open vs. Obstructed Airway



If the patient can't breathe, they may die. If the patient is not conscious, it maybe as simple as tilting the head back to open the airway.

Recovery Position



- **Body:** Laid on its side;
- **Bottom Arm:** Reached outward;
- **Top Arm:** Rest hand on bicep of bottom arm;
- **Head:** Rest on hand;
- **Legs:** Bent slightly;
- **Chin:** Raised forward;
- **Mouth:** Pointed downward.

PM 3-7



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3-13

Repositioning the patient can also aid in keeping the airway open.

Providing Comfort



What can you (or others) do?

- Keep them warm.
- Offer a hand to hold.
- Maintain eye contact.
- Be patient and understanding.
- If you must move on to provide aid to another person, let them know.

PM 3-8



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Sometimes a patient just needs someone to provide comfort. These are the steps in providing comfort. Remember in the initial stages of a natural disaster assessment, you will not have time to provide comfort.

Treating Burns:



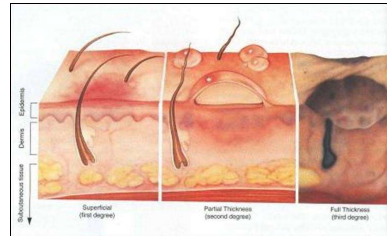
- Prevent hypothermia;
- Manage pain;
- Reduce risk of infection.



You may come across a patient with burns due to a fire, electrical shock or chemical burns. The 3-key things to know about dealing with burns are shown here.

Burn Classifications:

- **Superficial:** epidermis.
- **Partial Thickness:** dermis and epidermis.
- **Full Thickness:** subcutaneous layer and all layers above.



PM 3-9



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3-16

1st degree burns are to the outer layer and may be like a severe sunburn.

2nd degree has blistering.

3rd degree has damage to the underlying tissue and needs a medical professional help in treating.

Wound Care

- **Main treatment for wounds:**

- Control bleeding;
- Apply dressing and bandage.

- **Apply dressing and bandage:**

- Apply dressing directly to wound;
- Bandage holds dressing in place.



PM 3-11



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3-17

In your SERT backpack, you have a limited supply of bandages to assist patients. You will need to monitor your supplies and do not hesitate to radio in for additional supplies, as necessary.

Always remember to apply direct pressure to bleeding areas and keep it in place until the bleeding stops. Your patient or other neighbor maybe able to assist in keeping the pressure on.

Amputations



- If amputated body part is found:
 - **Save tissue parts**, wrapped in clean material and placed in plastic bag;
 - **Keep tissue parts cool**, but NOT directly on ice;
 - **Keep severed part with survivor.**

PM 3-11



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3-18

OK, not a pleasant thought and you are probably looking at a potential tourniquet situation. Follow these steps in dealing with a found body part.

Impaled Objects



When foreign object is **impaled in patient's body**:

- **Immobilize** affected body part;
- **Do not attempt to move or remove**;
- Try to **control bleeding** at entrance wound;
- **Clean and dress wound**, making sure to stabilize impaled object.

PM 3-12



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3-19

During a building collapse a person may be impaled by an object. **DO NOT** try to remove the object, leave that to the medical professional. Removing the object could lead to internal bleeding.

Fractures, Dislocations, Sprains, Strains



- **Immobilize injury** and joints immediately above and below injury site.
- If uncertain of injury type, **treat as fracture.**

PM 3-12



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3-20

Broken bones are painful, as are dislocations and sprains and strains. Unless there is severe bleeding, you will need to immobilize the injury and report the situation. Then continue to move on with your assessment.

Dislocations

- **Dislocation is injury** to ligaments around a joint:
 - It is so severe that it permits separation of bone from its normal position in a joint.
- **Treatment:**
 - Immobilize; do **NOT** relocate.
 - Check Pulse, Movement, and Sensation (PMS) before and after splinting/immobilization.

PM 3-13

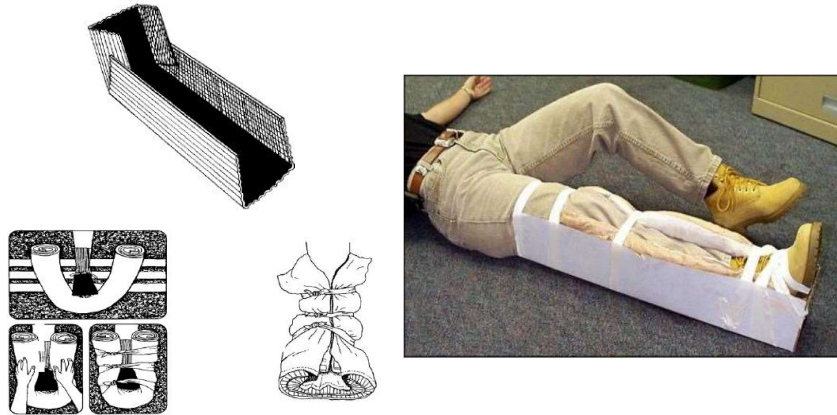


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3-21

While this will be painful to the patient, DO NOT attempt to relocate the joint! This is a job for a medical professional.

Splinting



PM 3: 14-15



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3-22

Splinting is not hard. You can use a variety of cardboard, rolled newspapers, magazines, towels to form a splint. Then get out your DUCT TAPE and secure the splint in place.

Heat-Related Injuries



- **Heat cramps**
 - Muscle spasms brought on by over-exertion in extreme heat.
- **Heat exhaustion**
 - Occurs when exercising or working in extreme heat results in loss of body fluids.
- **Heat stroke**
 - Survivor's temperature control system shuts down.
 - Body temperature rises so high that brain damage and death may result.

PM 3-17



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3-23

Heat-Related injuries may not be much of a concern here in OHCC. However, we can't rule out a disaster which strikes on a hot Summer's day. As a responder, you need to make sure you keep hydrated. These are the signs of heat related situations.

Session 2 Unit 3 Summary



- **Life-saving measures** SERT volunteers can take:
 - Control bleeding using direct pressure and/or a tourniquet;
 - Maintain normal body temperature;
 - Open airway and position patient correctly.
- **Other injuries that are common** after disasters:
 - Burns;
 - Wounds;
 - Amputations and impaled objects;
 - Fractures, dislocations, sprains, and strains;
 - Heat-related injuries.

PM 3-19



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3-24

Today we have reviewed life-saving measures and other common injuries that may occur following a disaster.

Homework Assignment



Read units to be covered in next session:

Session 3

- Unit 4: First Aid Operations, Part 2.
- Unit 5: Disaster Psychology.



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3-25

For your next class continue your readings of Units 4 and 5. Thank you all for your participation.