The immediate response to bleeding
Recognize life-threatening bleeding
Appropriate ways to stop the bleeding
The help given by an immediate responder can often make the difference between life and death, even before professional rescuers arrive.

With the right training, YOU can help save lives!

Why Do I Need This Training?
- Work-related injuries
- Mass shootings
- Home injuries
- Motor vehicle crashes
- Bombings

WARNING! Some of the images shown during this presentation are graphic and may be disturbing to some people.
Primary Principles of Immediate Response

- Ensure your own safety
  - The ABCs of Bleeding
  - A = Alert – call 9-1-1
  - B = Bleeding – find the bleeding injury
  - C = Compress – apply pressure to stop the bleeding by:
    1. Covering the wound with a clean cloth and applying pressure by pushing directly on with both hands, OR
    2. Using a tourniquet, OR
    3. Packing (filling) the wound with gauze or a clean cloth and then applying pressure with both hands

ABCs of Bleeding

- Safety
  - Before you offer any help, you must remain safe
  - If you become injured, you will not be able to help the victim
  - Initiate care if the scene is safe for you to do so
  - If, at any time, your safety is threatened, attempt to remove yourself from danger and find a safe location
  - Protect yourself from blood-borne infections by wearing gloves, if available

- Alert
  - Get help
    - Call 9-1-1 yourself, OR
    - Tell someone to call 9-1-1

Alerting 9-1-1 will notify and get emergency medical responders and, depending on the situation, police officers to respond to the scene

ABCs of Bleeding

- Bleeding
  - Find where the victim is bleeding from
    - Open or remove the clothing so you can see the wound
  - Look for and identify "life-threatening" bleeding
    - Blood that is spurting out of the wound
    - Blood that won’t stop coming out of the wound
    - Blood that is pooling on the ground
    - Clothing that is soaked with blood
    - Bandages that are soaked with blood
    - Loss of all or part of an arm or leg
    - Bleeding in a victim who is now confused or unconscious

What is "life-threatening" bleeding?

- Arm and Leg Wounds
  - Most frequent cause of preventable death from injury
  - Bleeding from these wounds can be controlled by direct pressure or a tourniquet

Wounds That Can Lead to Death from Bleeding
Primary Principles: ABCs of Bleeding

B • Bleeding

Wounds That Can Lead to Death from Bleeding (1 of 3)

- Torso Junctional Wounds
- Neck, shoulder, and groin
- Bleeding can be controlled by direct pressure and wound packing

Direct Pressure (1 of 3)

- Use your hand or fingers
- Effective most of the time for external bleeding
- Direct pressure can stop even major arterial bleeding
- Bleeding control requires very firm, continuous pressure until relieved by medical responders
- To be effective, apply pressure with the victim on a firm surface to provide support
- Don’t release pressure to check the wound

Wounds That Can Lead to Death from Bleeding (2 of 3)

C • Compression

Chest and Abdominal Injuries
- Front, back, or side
- Usually cause internal bleeding
- Often victims need rapid transport to a trauma center
- These victims CAN’T be stopped outside the hospital
- These victims need rapid transport to a trauma center
- Identify these patients to EMS providers when they arrive

C • Compression (continued)

Ensure your safety

- Direct Pressure
  - Use any clean cloth or gauze
  - Apply steady pressure directly on the wound
**Primary Principles: ABs of Bleeding**

**C • Compression:** Stop the Bleeding (continued)

**Direct Pressure**
- Use any clean cloth (for example, a shirt) to cover the wound
- If the wound is large and deep, try to “stuff” the cloth down into the wound

**Ensure your safety.**

Look for life-threatening bleeding.

Is a trauma first-aid kit available?

Where is the wound? Arm or leg?
Principles:

1. Stop the bleeding immediately.
2. The tourniquet is a device that stops the flow of blood.
3. If applied correctly, the tourniquet will stop blood flow into the extremity and out of the wound.
4. Limiting blood loss may prevent the patient from going into shock or dying.

The Tourniquet

- A tourniquet is a device that stops the flow of blood.
- If applied correctly, the tourniquet will stop blood flow into the extremity and out of the wound.
- Limiting blood loss may prevent the patient from going into shock or dying.

Tourniquet Application

- Apply immediately if life-threatening bleeding is seen from an arm or a leg.
- The tourniquet can be placed right on top of clothing, if necessary.
- Place 2 to 3 inches above the bleeding wound (higher on the arm or leg)
  - BUT...
    - DO NOT apply directly over the knee or elbow joint.
    - The bones of the joint will prevent the tourniquet from compressing the artery, as you won't stop the bleeding.
    - DO NOT apply directly over a pocket that contains bulky items.
    - Anything in a pocket that is underneath a tourniquet will interfere with the function of the tourniquet.
- Tighten the tourniquet until bleeding stops.

C.A.T. Tourniquet

The C.A.T. tourniquet is the military's preferred tourniquet because it is easy to use and can be rapidly applied.

C.A.T. Tourniquet

- Compression:
  - 1.0
- Tourniquet
  - Application
  - Tighten until the bleeding stops.
- Bleeding
  - Ending
- Military
  - Place
  - Tighten leg
  - Blood
  - Bleeing
- Extremity
  - Bleeding
- A
  - Wound
  - Stops
- Apply
  - Tourniquet
  - Blood
  - Bleeding
- BUT...
  - Photo courtesy of Peter Pons, MD, FACEP
  - Emergency Medical Technology (EMT) Inc.
Principles:

**Key Points (1 of 3)**
- Using one of the recommended tourniquets is a safe procedure
  - Improvement (homemade) tourniquets are much less effective than commercially available tourniquets such as the C.A.T. and are difficult to make and apply without extensive practice
- If the bleeding is not stopped with one tourniquet and it is as tight as you can get it, place a second one, if available, just above the first and tighten as before

**Common Mistakes**
- Not using a tourniquet or waiting too long to apply it when there is life-threatening bleeding
- Not making the tourniquet tight enough to stop the bleeding
- Not using a second tourniquet, if needed
- Periodically loosening the tourniquet to allow blood flow to the injured extremity
- Causes unacceptable additional blood loss—DO NOT LOOSEN
- Removing a tourniquet
- Only a paramedic or physician should loosen or remove it

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**Questions about tourniquets?**
Principles of Bleeding Control

**C • Compression:** Stop the Bleeding (continued)

- Ensure your safety
- Look for life-threatening bleeding
- Arm or leg
- No
- Transferrin: immediate

Hemostatic Dressings (Bleeding Control Dressings)
- Hemostatic dressings are materials that help cause blood to clot:
  - Examples of hemostatic dressings include:
    - QuickClot (civilian)
    - Combat Gauze (military)
    - Celox
    - Calgis Rapid
    - Chitosan
    - Chitosan Gauze

Wound Packing (if able)
- Pack the wound
  - Hemostatic dressing, OR
  - Gauze roll, OR
  - Clean cloth
  - Staff right into the wound and directly onto the bleeding site
Questions about wound packing and direct pressure?

Bleeding control in children
- In all but the extremely young child, the same tourniquet used for adults can be used in children.
- For the infant or very small child (tourniquet too big), direct pressure on the wound as described previously will work in virtually all cases.
- For large, deep wounds, wound packing can be performed in children just as in adults using the same technique as described previously.

Blood Exposure
- After arrival of medical responders, if you have any blood on you:
  - Wash thoroughly with soap and water to remove all blood, AND
  - Notify medical responders of possible exposure.
Summary

• Ensure your own safety
• The ABCs of Bleeding
  A – Alert – call 9-1-1
  B – Bleeding – find the bleeding injury
  C – Compress – apply pressure to stop the bleeding by:
  1. Covering the wound with a clean cloth and applying pressure by pushing directly on it with both hands, OR
  2. Using a tourniquet, OR
  3. Packing (filling) the wound with gauze or a clean cloth and then applying pressure with both hands

Conclusion

The only thing more tragic than a death... is a death that could have been prevented.

Thank you for your participation.

Questions?

For further information and additional resources, please visit

BLEEDINGCONTROL.ORG