

1. **HAZARDS: to yourself? PROTECTION: Gloves** (use plastic bag, etc.). **Find the origin/s of bleeding.** (Cut away clothing if needed, with permission.) On blood thinners?
2. **DRESSING**: Cover wound with a clean gauze/cloth, to reduce contaminants & absorb blood.
  - **Hemostatic gauze**, infused with clotting agent is helpful.  
(Some brands: Quick Clot, Celox, ChitoGauze, & ChitoSAM).
  - **Avoid sharp** bone fragments, debris, which can cause further damage with pressure. Flush if time
  - **Deep/wide wound: Packing** (stuffing) with gauze or a clean cloth (don't 'pack' into rib or torso cavities)
    - ✓ **Must be accomplished very rapidly**
    - ✓ **Can pull rolled gauze from center**- quick & avoids gauze unravelling on the ground
3. **BANDAGE snugly**: wrap with cloth/ gauze strip to hold the dressing in place. Twist with each turn around wound, to add pressure. Gauze end tied in bow, taped or tucked under wrapped layers (for easier release). Check pulse to ensure that blood flow is not impeded.
4. **PRESSURE: Apply immediate firm, steady pressure directly** on the wound, with palms of both hands; use your body weight over the wound, as needed, even if painful for survivor. (For large wounds, e.g., thigh, may insert a flat weighty object (flat rock, thin board) into/onto bandage layers to increase pressure). Don't replace soaked gauze, but may add more.
  - **Survivor seated** or laying down. **Elevate bleeding site** above heart if doesn't interfere with pressure.
  - **Keep pressure applied** until EMS takes over care or bleeding has stopped, (which may require ~10 – 20 + mins.). If you are unsure if bleeding has stopped, continue applying pressure. **Until clotting, no peeking.**
5. **AFTERCARE: Check/ treat for shock.** (see "Shock" reference sheet)
  - **After clotting, remove dressing** to check for infection every 4 – 6 hrs.. (swelling, redness, oozing, striated markings radiating from wound; flush wound). Re-wrap.
  - **Impaled object**: don't remove object. Stabilize it- wrap w/gauze, other materials. Apply pressure around the object when excessive bleeding. Can use tourniquet if necessary. (see "Impaled Object" and "Tourniquet" reference sheets)

## **BLOOD LOSS**

**Average adult:** has 5-6 liters (~1.5 gallons) of blood

### **Summary of types of bleeding and what to do:**

**Capillary bleed:** Surface abrasion.

- ✓ Flush with water, bandage, check for infection for next 48 hrs.

**Venous bleed:** Deeper wound.

- ✓ Apply pressure with dressing, bandage, raise above heart. After clotting, regularly check for infection and for shock. On blood thinners?

**Arterial bleed:** Spurting or pouring out.

Arteries are major carriers of oxygen. Loss of 40+ % of body's blood, can lead to death in 1 - 3 mins.

- ✓ Stop the bleed with heavy pressure, probably packing wound, tourniquet. Record time tourniquet applied. Treat for shock. Seek professional help.