STOP THE BLEED®

SAVE A LIFE

STOP THE BLEED® Course
American College of Surgeons

Version 2

THE COMMITTEE ON TRAUMA

STOPTHEBLEED.ORG

ACS AMERICAN COLLEGE OF SURGEONS

THE COMMITTEE ON TRAUMA

QUALITY PROGRAMS of the AMERICAN COLLEGE OF SURGEONS

American College of Emergency Physicians®

ADVANCING EMERGENCY CARE

NAEMT®

The American College of Surgeons Committee on Trauma

The American College of Emergency Physicians

The National Association of Emergency Medical Technicians

The Committee on Tactical Combat Casualty Care

Some of the images shown during this presentation may be disturbing to some people.

Why Do I Need This Training?

The #1 cause of preventable death after injury is bleeding.

Why Do I Need This Training?

- Hemorrhagic (hypovolemic) shock begins when someone loses about 20 percent, or one-fifth, of their body's blood or fluid supply.
- The heart is unable to circulate a sufficient amount of blood to oxygenate vital organs.
- Estimated blood volume for a 70kg person is ~ 5L, hypovolemia would likely occur with a 1L loss of blood.

Sobrino, 2013; Asensio, et. Al, 2003.; Berry, et al., 2014

Why Do I Need This Training?

Average time to bleed out

Average time for 1st responders to arrive

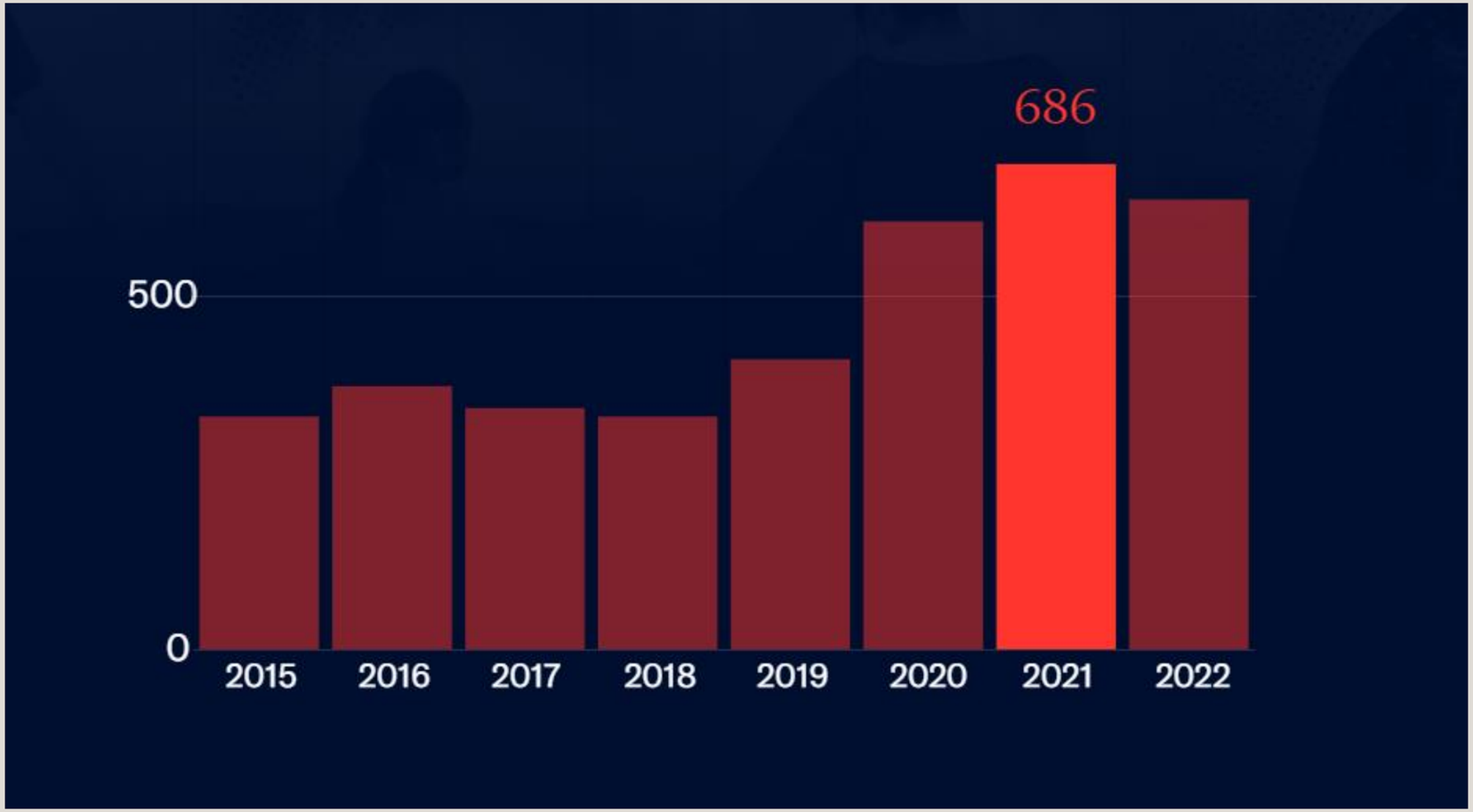
Trauma-related deaths worldwide due to bleeding

Curry et al., 2011

When Would I Need This Training?

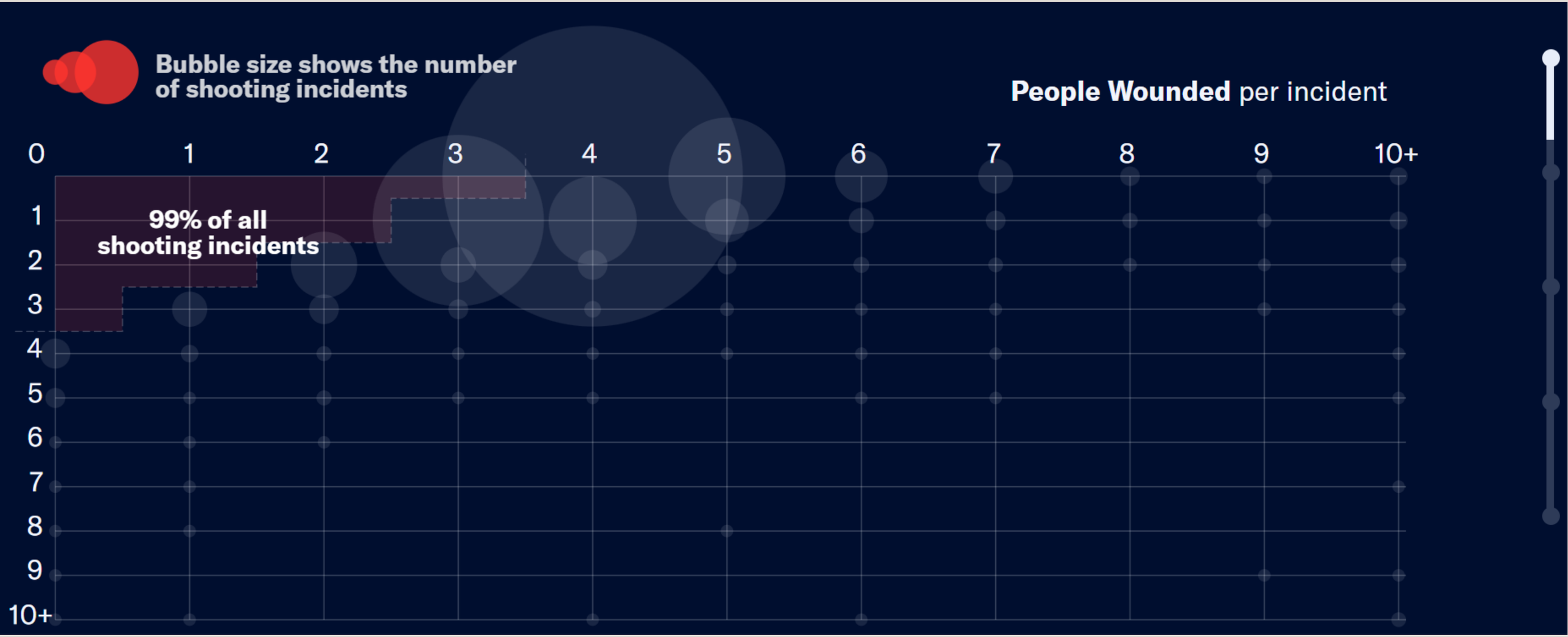
- Motor Vehicle Accidents
- Stadium Collapse
- Bombing
- Mass shooting events
- Athletics?
- This training can be useful in a variety of trauma related situations.
- However……

When Would I Need This Training?



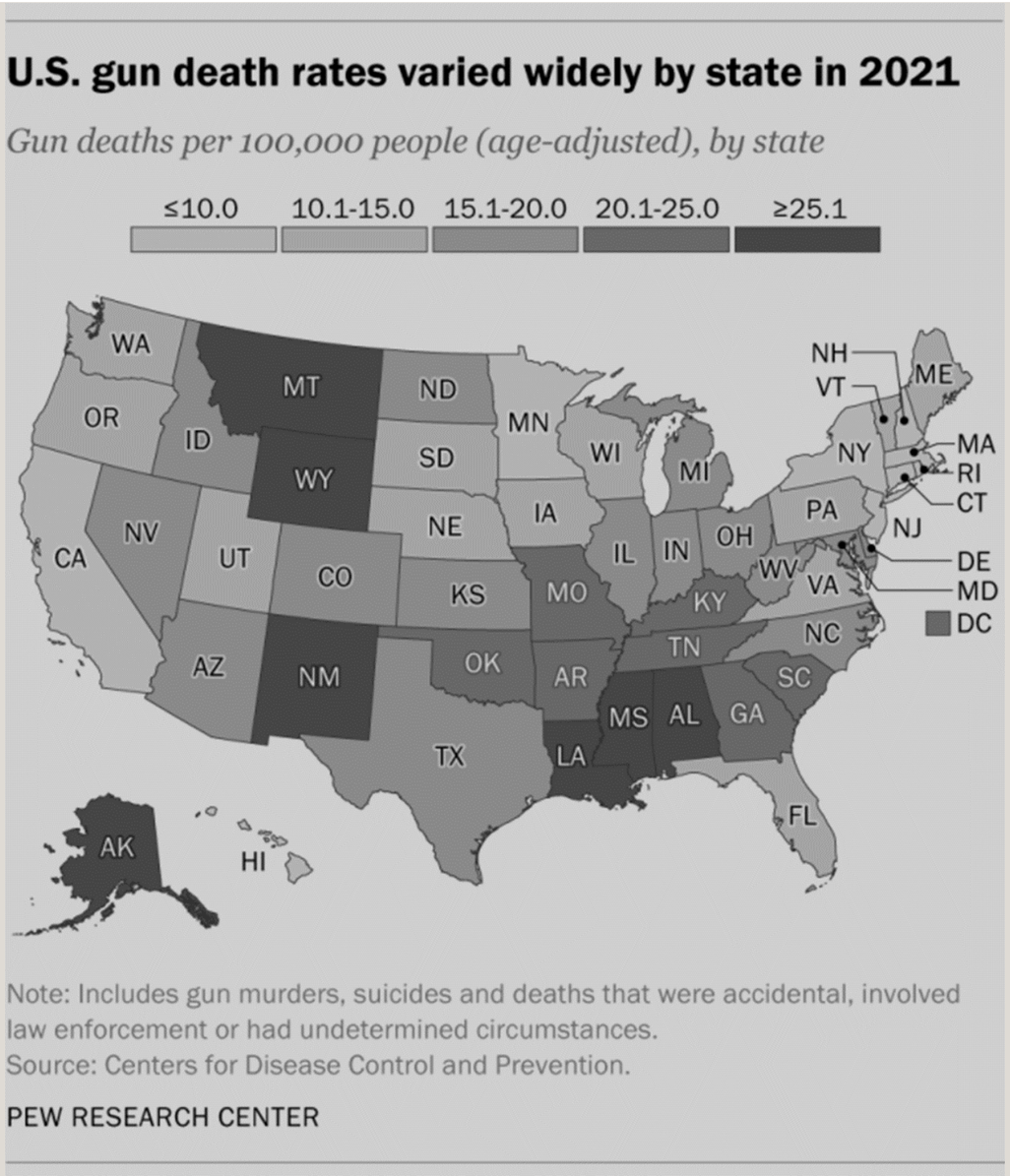
Everytown, 2023.

When Would I Need This Training?



Everytown, 2023.

Where Would I Need This Training?



Where Can I Use This Training?

Goals

1. Identify

Recognize life-threatening **bleeding**

2. Stop the Bleed

Take steps to

STOP THE BLEEDING

✓ Pressure

✓ Packing

✓ Tourniquets

Personal Safety

YOUR safety is YOUR first priority

- **If you are injured, you cannot help others**
- **Help others only when it's safe to do so**
- **If the situation changes or becomes unsafe:**
  - ✓ **Stop**
  - ✓ **Move to safety**
  - ✓ **If you can, take the victim with you**

Personal Safety

YOUR safety is YOUR first priority

- **Wear gloves if you can**
- **If you get blood on you, be sure to clean any part of your body that the blood has touched**
- **Tell a health care provider that you got blood on you, and follow his or her direction**

A Alert 911

B Bleeding

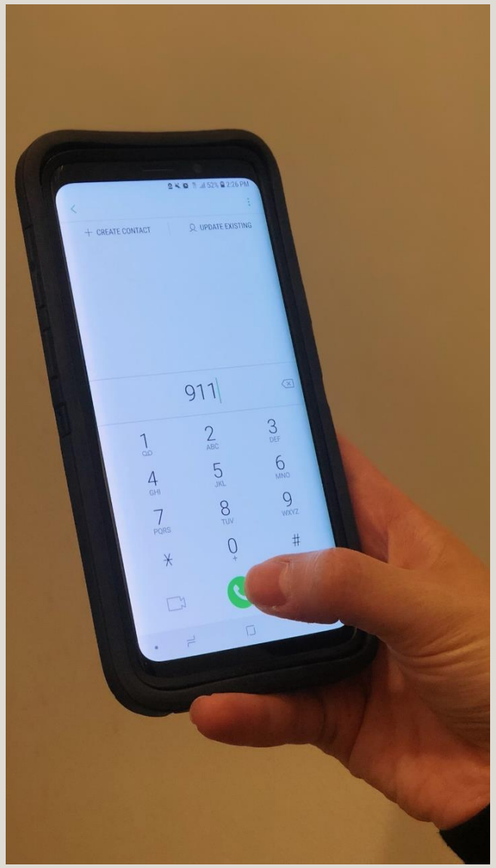
C Compress

ABCs of Bleeding Control

A Alert 911

B Bleeding

C Compress



ABCs of Bleeding Control

A Alert 911

- **Call 911**
- **Know your location**
- **Follow instructions provided by 911 operator**

ABCs of Bleeding Control

A Alert 911

B Bleeding

C Compress

B Bleeding

- Find source of bleeding
- Look for:
  - ✓ Continuous bleeding
  - ✓ Large-volume bleeding
  - ✓ Pooling of blood

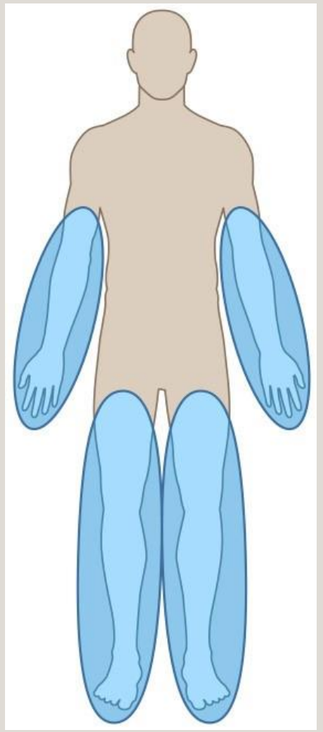
B Bleeding

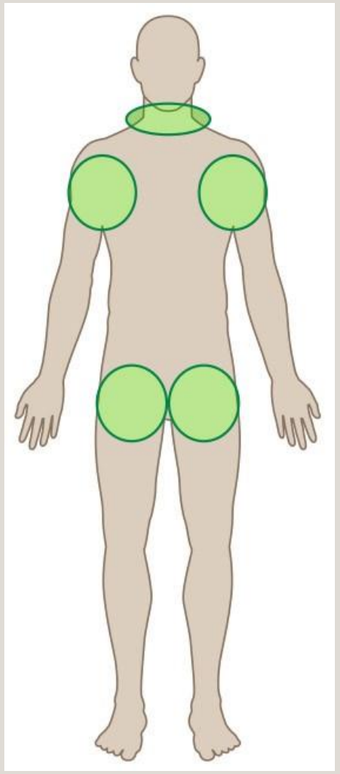
- There may be multiple places the victim is bleeding
- Clothing may also hide life-threatening bleeding

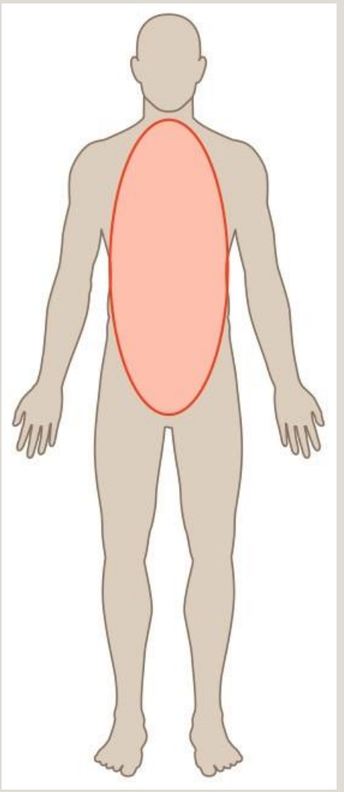
ABCs of Bleeding Control

B Bleeding

- Arms and legs
- Neck, armpits, and groin
- Body







ABCs of Bleeding Control

A Alert 911

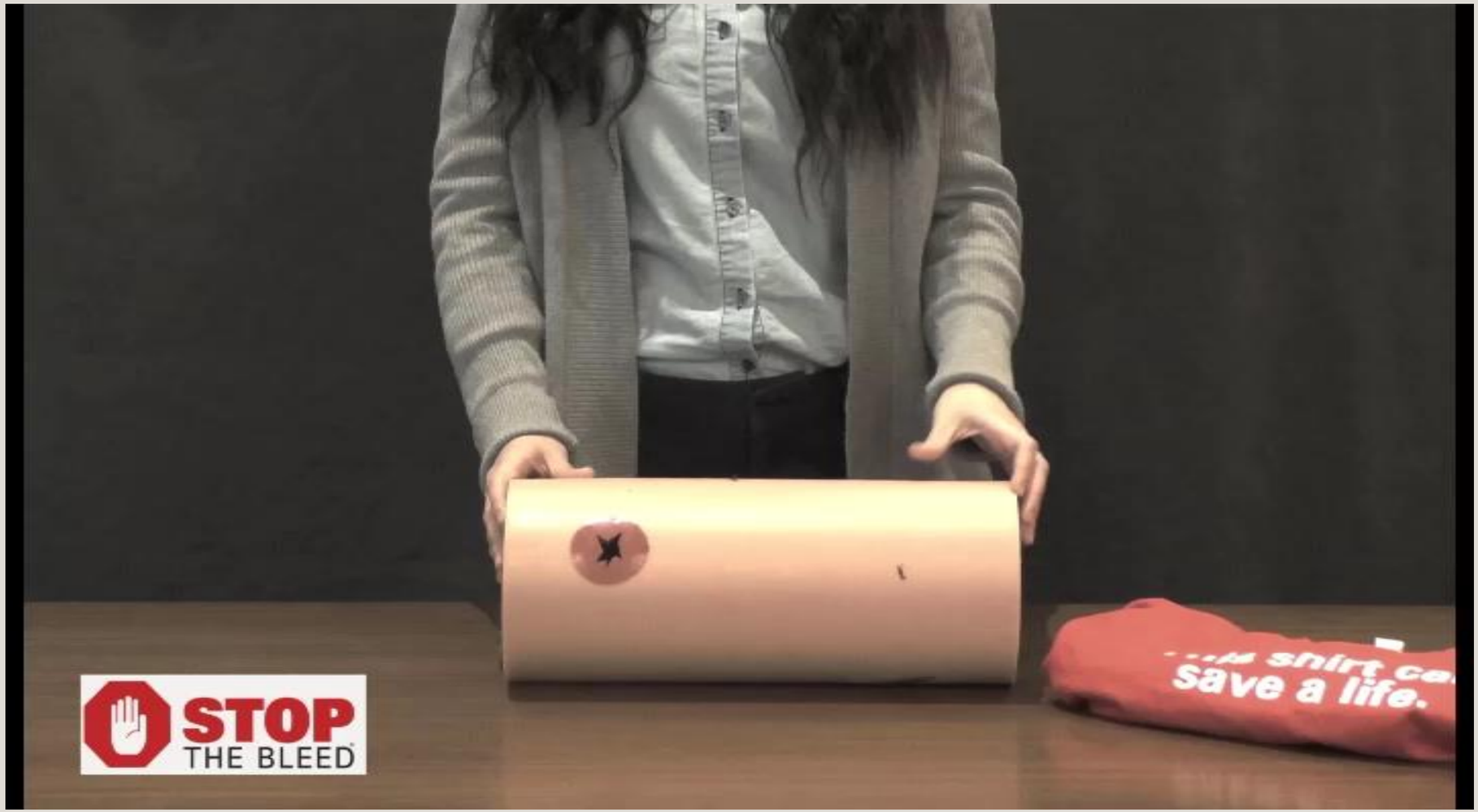
B Bleeding

C Compress - Pressure

C Compress - Pressure

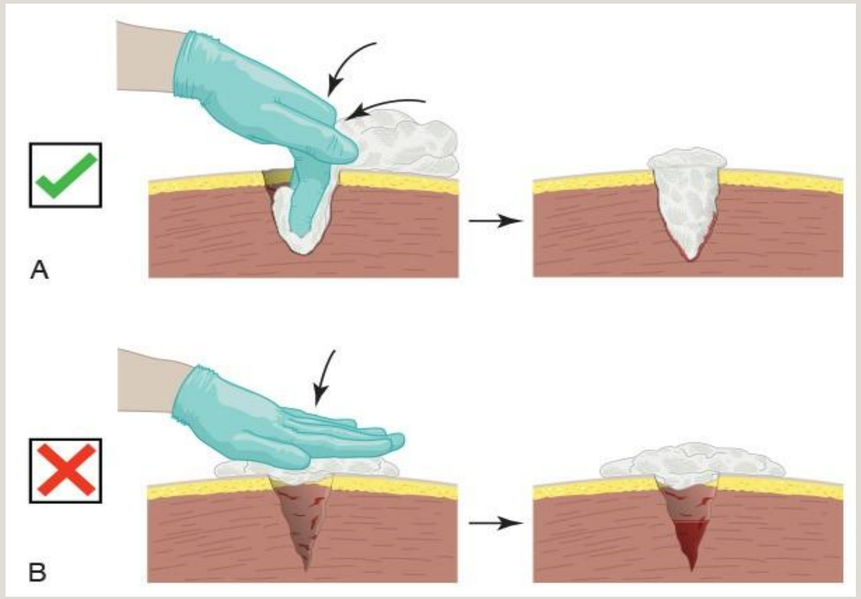
- Apply direct pressure to wound
- Focus on the location of the bleeding
- Use just enough gauze or cloth to cover injury
- If pressure stops the bleeding, keep pressure on wound until help arrives

ABCs of Bleeding Control

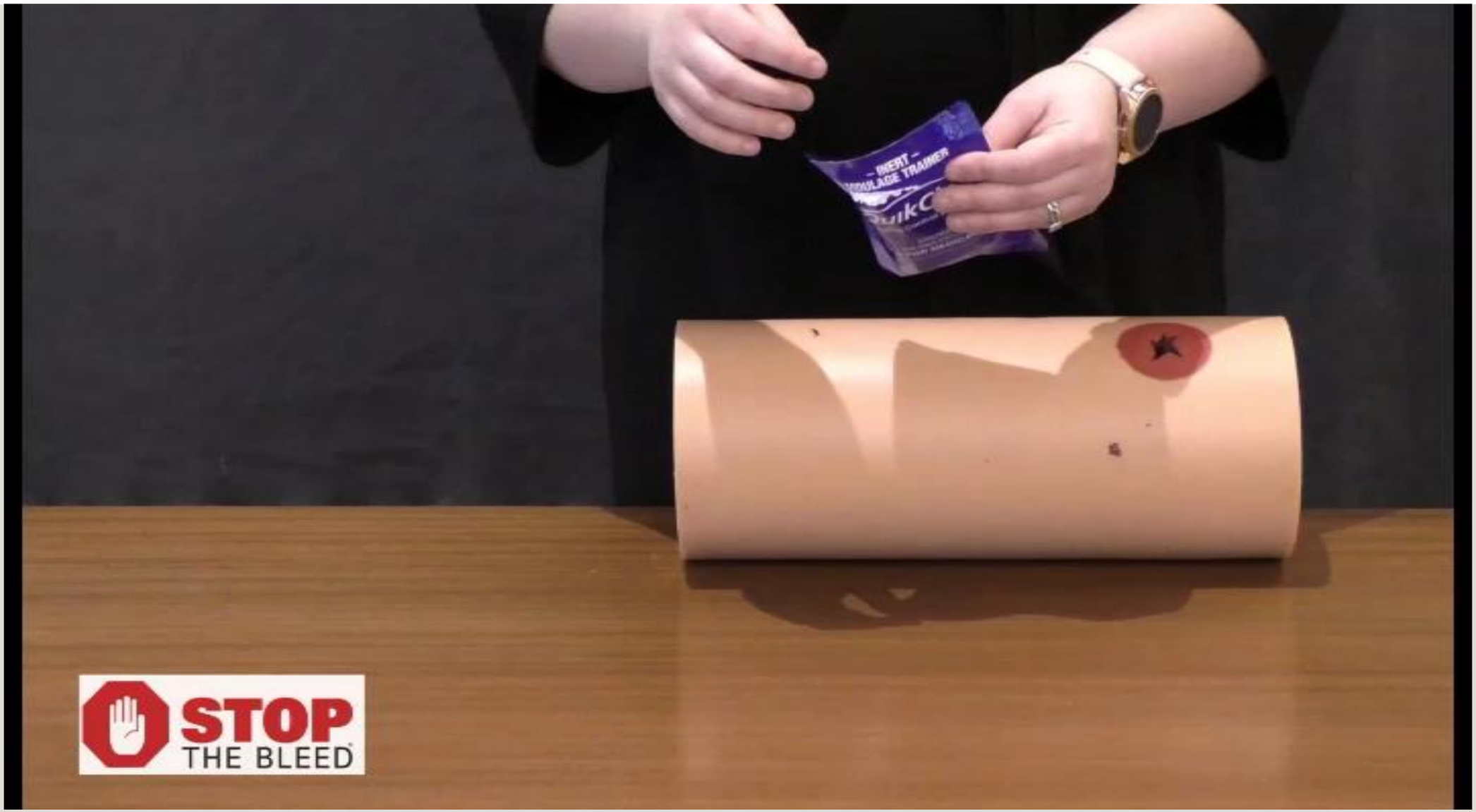


C Compress - Packing

- For large wounds, superficial pressure is not effective
- If bleeding is from a deep wound, pack gauze tightly into the wound until it stops the bleeding; hold pressure until help arrives

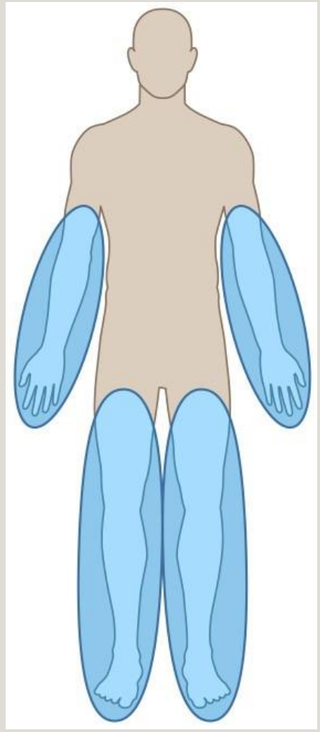


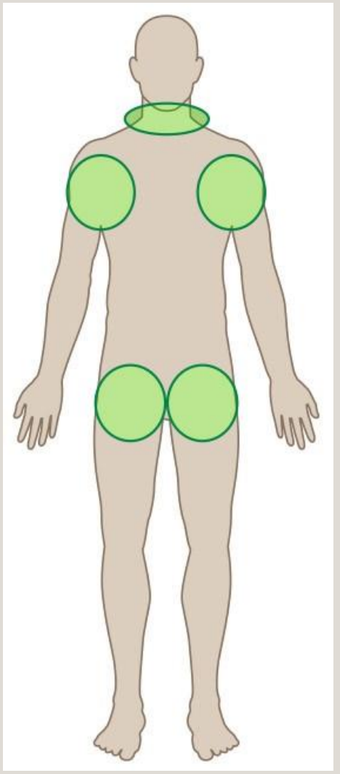
ABCs of Bleeding Control

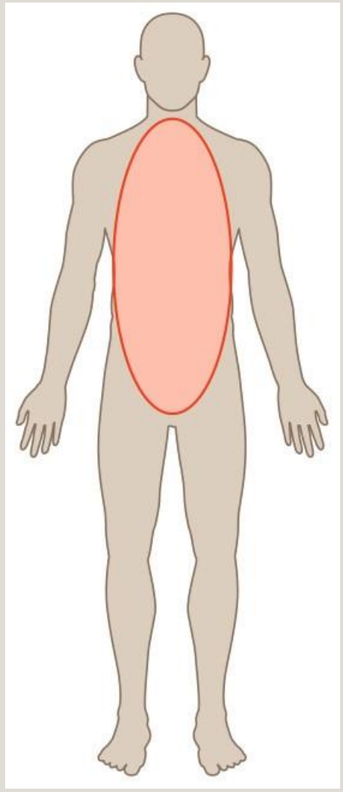


C Compress - Packing

- Arms and legs
- Neck, armpits, and groin
- Body







C Compress - Tourniquet

- Apply 2 to 3 inches above wound
- Do not place over the elbow or knee
- Tighten tourniquet until bleeding stops
- Do NOT remove the tourniquet

C Compress - Tourniquet

- Can apply to others or on yourself
- Can be applied over clothes
- Tourniquets HURT
- A second tourniquet may be required to stop the bleeding

ABCs of Bleeding Control

ABCs of Bleeding Control

CoTCCC Recommended STB Tourniquets

Recommended Non-Pneumatic Limb Tourniquets

- **Combat Application Tourniquet Gen 6 (CAT-6)**
- **Combat Application Tourniquet Gen 7 (CAT-7)**
- **Ratcheting Medical Tourniquet (RMT) Tactical**
- **SAM Extremity Tourniquet (SAM-XT)**
- **SOF Tactical Tourniquet–Wide (SOFTT-Wide)**
- **Tactical Mechanical Tourniquet (TMT)**
- **TX2 Tourniquet (TX2)**
- **TX3 Tourniquet (TX3)**

CoTCCC Recommended STB Tourniquets

Recommended Pneumatic Limb Tourniquets

- **Delphi EMT (EMT)**
- **Tactical Pneumatic Tourniquet 2” (TPT2)**

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.**

FAQs

- **Impaled objects?**
- **Improvised tourniquets?**
- **Loss of arm or leg?**
- **Pain?**
- **Other questions?**

Summary

✓Personal safety

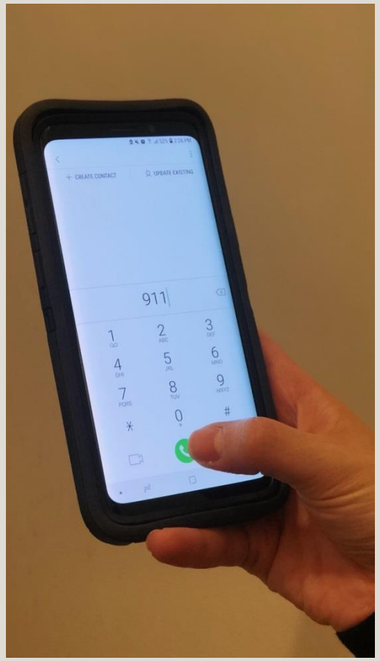
A Alert 911

B Find bleeding

C Compress with pressure and/or packing

C Compress with a tourniquet

✓ Wait for help to arrive



Triage Quick Notes

- **Bleeding from ear, nose, head - loosely wrap, don’t pack**
- **Ensure the tourniquet is always visible**
- **Junctional areas - pack with hemostatic gauze / quikclot and hold 3 minutes**
- **Take Care of Arterial Bleeding first**
- **Consider jaw thrust for airway control**
- **Consent - Explain. And Keep Explaining.**

Mass Casualties / Incidents

- 3 or more victims
- If the scene is safe keep people there
- Focus on blood control - arterial bleeding first
- EMT/Paramedics/Officers will take command when they arrive

Simple Triage and Rapid Transport

Walking = GREEN

Respirations:

> 30 - RED

< 30 - continue assessment

If they need help breathing / airway needs to be opened - RED

Simple Triage and Rapid Transport

Perfusion

Capillary refill < 2 seconds + radial pulse present : Continue assessment

Capillary refill > 2 seconds OR radial pulse absent : RED

Neurological

Can they squeeze your hand? YELLOW

Unresponsive – RED

You should be doing neurological assessment if they are <30 respirations without severe difficulty, radial pulse, capillary refill , 2 seconds (keep the environment in mind)

Simple Triage and Rapid Transport

Triage for 8 and under
15 seconds max
Same order as START
Respiratory <15 or >45 RED
Perfusion - no peripheral pulse RED
Mental Assessment AVPU

For more information:

STOPTHEBLEED.ORG

STOP THE BLEED®

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