



Welcome!

Introduce yourself and the rest of the team

Some ice breakers:

- How many people of medical professionals?
- How many are not?
- Does anyone want to share why they signed up for Stop The Bleed® or what they are interested in learning?

Sandy Hook Elementary School Dec 2012



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Introduction | A-Alert | B-Bleeding | C-Compression |

“Out of great tragedy, comes a life-saving response”

In 2012, 20 children and eight adults were casualties from a tragic mass shooting at Sandy Hook Elementary School in Newtown, CT. A concerned local trauma surgeon, convened a panel of national experts to evaluate the response to such emergencies. This group was known as the Hartford Consensus.

From the Hartford Consensus, a national emergency response goal emerged to improve victim survival following mass shootings and other intentional acts of mass violence by empowering trained bystanders to take life-saving action if quickly needed—regardless of the situation or cause of severe bleeding. STOP THE BLEED®, a national public awareness campaign, was launched shortly thereafter, in October of 2015 by the White House, with a call to action to begin training more people to become immediate responders until professional help arrives.*



QUALITY PROGRAMS
of the AMERICAN COLLEGE
OF SURGEONS

**The American
College of Surgeons
Committee on
Trauma**



ADVANCING EMERGENCY CARE

**The American
College of
Emergency
Physicians**



**The National
Association of
Emergency Medical
Technicians**



**The Committee
on Tactical
Combat
Casualty Care**

STOP THE BLEED® is now an educational program that represents the joint effort of many organizations.

It represents the current “best practice” recommendations for how to manage life-threatening bleeding.

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

This course was designed to teach you how to recognize and control life-threatening hemorrhage. We cannot do that without clinical photographs that are relevant to the course content. Some of these photographs are graphic in nature and may be disturbing to some individuals.

Boston Marathon Bombings – April 15, 2013



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Boston Marathon Bombing on April 15, 2013. 2 bombs, 14 seconds apart, killing 3, injuring hundreds, 17 who lost limbs

Image Left: Often times, even if police officers attend the scene their main priority is securing the area and ensuring the threat has been mitigated.

Therefore, the public (you!) are most likely to be a first responder.

Image Right: No officers or Paramedics present, only public bystanders available to help

These tragedies are not limited to the USA, we have experienced similar event in Toronto.

Toronto Van Attack – April 23, 2018



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Toronto Van Attacked on April 23, 2018.
10 Killed, 16 injured

As of November 2021, the death toll was raised to 11 after victim who was hospitalized since the incident had died.

Toronto Danforth Shooting – July 22, 2018



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Toronto Danforth Shooting: 2 killed, 13 injured

Why Do I Need This Training?

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

Bleeding is the most common cause of preventable death after injury and must be stopped as soon as possible.

Where Can I Use This Training?



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Ask class, where might these new skills be called upon.

Many injury mechanisms can result in serious bleeding.

Stress that “while mass shootings currently receives a lot of attention, serious bleeding is more likely to result from everyday injuries such as those that may occur at home, at work or while on the road.

The techniques being taught in this course apply to bleeding regardless of the cause.”

Consider using one or two examples where they may encounter life-threatening bleeding such as during a sporting event or around broken glass at home.

Goals

1. Identify

Recognize
life-threatening
bleeding

2. Stop the Bleed

Take steps to
STOP THE BLEEDING
✓ Pressure
✓ Packing
✓ Tourniquets

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“The focus of this program is the immediate response to bleeding.

Everyone should know how to recognize life-threatening bleeding.

Everyone should be able to take the appropriate steps to control bleeding until help arrives.

If you do not feel comfortable with controlling bleeding, you can still help by calling 911 and assisting others who are controlling bleeding.”

Good Samaritan Act, 2001



Good Samaritan Law:

a legal principle that prevents a rescuer who has voluntarily helped a victim in distress from being successfully sued for 'wrongdoing.' Its purpose is to keep people from being so reluctant to help a stranger in need for fear of legal repercussions if they made some mistake in treatment.

“In Ontario we have the Good Samaritan Act, passed in 2001.

An Act to protect persons from liability in respect of voluntary emergency medical or first aid services”

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**

“Your personal safety is an important consideration. If you become injured as well, you won’t be able to help anyone and you will become a victim, the situation you find yourself in becomes more complicated. If the scene is not safe for whatever reason, you should remove yourself (and the victim, if possible) from danger and try to find a safe location. Once you reach safety, you can focus on bleeding control. “

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

Stress “the importance of personal protective equipment and avoiding contact with blood and body fluids.”

While the risk of transmission is extremely low, it is not zero.

- ✓ **Avoid direct contact with blood or body fluids on your skin, eyes, or mouth**
- ✓ **Wear gloves whenever possible**
- ✓ **Wash hands after any contact even if no visible blood**

Tell a health care provider that you got blood on you, and follow his or her direction

ABCs of Bleeding Control

A Alert 911

B Bleeding

C Compress

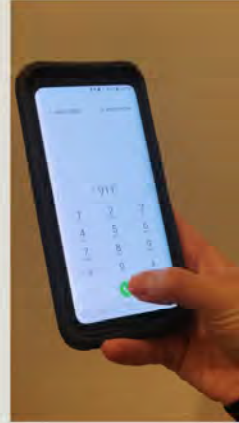
- A Alert 911
- B (identify) Bleeding
- C Compress

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

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The 911 dispatcher will guide you through the conversation. What happened?

When did it occur?

Where are you?

Number and status of victims?

Ongoing threats to your safety?

Note* (Can be explained to the participant if necessary) When you make a 911 call on a mobile phone, you are sending signals through the air. The tower that picks up your phone's signal may be near or not. That's not enough information for the dispatcher to find you.

You must know your location and if you are using a cell phone, the call back number.

If the situation and your battery power allows, you, or someone, should stay on the line.

ABCs of Bleeding Control

A Alert 911

B Bleeding

C Compress



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- A Alert 911
- B (Identify) Bleeding
- C Compress

ABCs of Bleeding Control

B Bleeding

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

“Life threatening bleeding is large volume bleeding that is continuous, large volume, pulsatile, like a sprinkler, or is enough to pool in clothing or on the ground. The faster we can control the bleeding the better the patient will do.”

ABCs of Bleeding Control

B Bleeding

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

“Even if you find one source of bleeding, there may be others.”

ABCs of Bleeding Control

B Bleeding

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



“The principles being taught in this course apply to external bleeding. This can occur from the extremities (blue) and from the junctional areas (green) which consist of the neck, armpits and groin. Junctional bleeding can be severe as large caliber blood vessels run through these areas. The third location where there can be bleeding is the body (red). This internal bleeding into the body cannot be controlled in the field and requires rapid transportation to a hospital or trauma center.”

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**



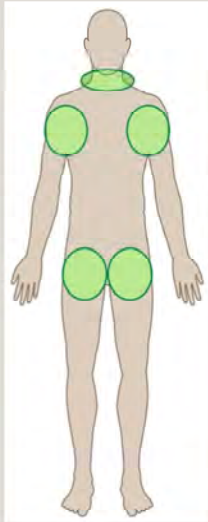
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Arm and leg Wounds

- Most frequent cause of **preventable** death from injury
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Torso Junctional Wounds



- Neck, shoulder, and groin
- Bleeding can be controlled by **direct pressure** and **wound packing**



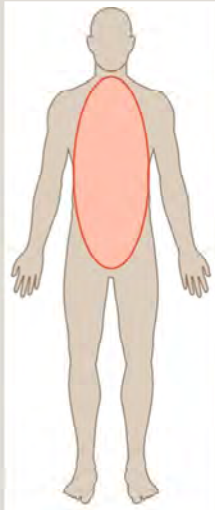
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Torso Junctional Wounds

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

Chest and Abdominal Injuries



- Front, back, or side
- Usually cause internal bleeding
- This bleeding **CANNOT** be stopped outside the hospital
- These victims need rapid transport to a trauma center
- Identify these patients to EMS providers when they arrive



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- Located in the Front, back, or side
- Usually cause internal bleeding
- This bleeding CANNOT be stopped outside the hospital
- These victims need rapid transport to a trauma center
- Identify these patients to EMS providers when they arrive

ABCs of Bleeding Control

A Alert 911

B Bleeding

C Compress - Pressure



ABCs of Bleeding Control

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

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“Pressure will stop the majority of bleeding.

Start with pressure, use a small amount of gauze or material, just enough to cover the wound. Excess gauze or material makes pressure ineffective. If gauze is unavailable, use any clean material.

Apply pressure directly to the bleeding site.

The application of pressure may require a significant amount of force. Apply enough force to stop the bleeding and continue applying this pressure until help arrives. “

ABCs of Bleeding Control



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THERE IS NO SOUND TO THIS VIDEO – THE INSTRUCTOR SHOULD EXPLAIN THE STEPS THE IMMEDIATE RESPONDERS IS TAKING.

The demonstration in the video is moving at a slower pace as to show the process. Remind the participant that fast action must be accomplished to control bleeding.

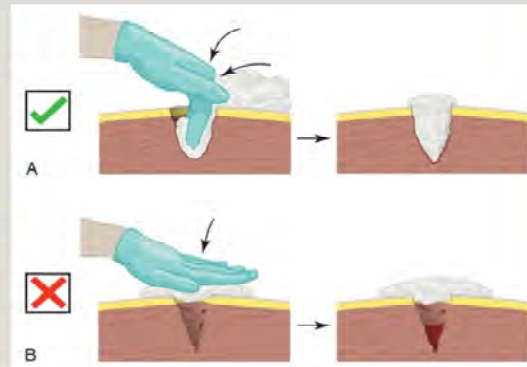
In the next series of three slides you will see how to apply pressure to a bleeding wound.

Here you see the application of pin point pressure directly onto the site of bleeding. This is an effective method of controlling bleeding.

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



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“If bleeding is from a cavity, superficial pressure may not work and you may need to pack the wound deeply and tightly. Be careful as there may be sharp objects or fragments of bone within the cavity. Once the bleeding stops, **do not check the wound**, simply hold pressure until help arrives.”

Ask why it is important to not check (or peek) at the wound?

Explain that the body’s “first clot is the best clot” due to a limited amount of clotting factors

ABCs of Bleeding Control



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Introduction | A-Alert | B-Bleeding | C-Compression |

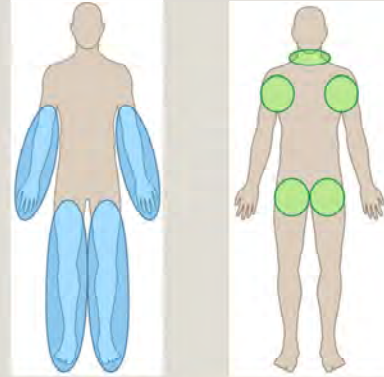
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ABCs of Bleeding Control

C Compress - Packing

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



ABCs of Bleeding Control

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 (*Only a paramedic or physician should remove it*)

Tourniquets should be considered for extremity bleeding that does not stop with pressure or packing, or, the situation does not allow you to maintain pressure on the wound.

Questions usually are asked about amputations and should you immediately use a tourniquet.

ABCs of Bleeding Control

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 (*placed above the first tourniquet*)

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The tourniquet should be applied 2-3 inches above the wound. Avoid placing a tourniquet onto a bony prominence or joint.

A tourniquet can be applied over light clothing however, remove any bulky clothing such as a jacket. If being placed over a pocket, ensure the pocket is emptied first otherwise the tourniquet will not be effective.

Continue tightening until the bleeding stops. Two tourniquets may be required to achieve hemorrhage control, with the 2nd tourniquet placed above the first one. It is a painful procedure, and severe pain should be expected. Do not remove the tourniquet(s) until help arrives.

ABCs of Bleeding Control



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ABCs of Bleeding Control



Beware of tourniquets
sold for \$14.99

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Several tourniquet models are commercially available.

Instructors should discuss the mechanisms of the types of tourniquets and differentiate between windlass rod types and ratcheting types. In addition, the instructor should advise participants they may see any of these tourniquets in the field and should familiarize themselves with the tourniquet and how it works. Beware of tourniquets sold for \$14.99. A good quality tourniquet should cost between \$35-\$50

ABCs of Bleeding Control

Key Points About Tourniquets

- Tourniquets are **SAFE**
- Improvised (homemade) tourniquets are much less effective than and are difficult to make and apply without extensive practice
- Training (practice) tourniquets should **NOT** be used during a real patient incident

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Key Points About Tourniquets

- Tourniquets are SAFE
- Improvised (homemade) tourniquets are much less effective. It is important to stress that improvised tourniquets are difficult to make and to apply correctly, and may in fact increase the bleeding by compressing the venous structures. Their utility has not been scientifically proven and therefore caution should be used when considering their use.
- Training (practice) tourniquets should NOT be used during a real patient incident

ABCs of Bleeding Control

Common Mistakes with Tourniquets

- **Not using** a tourniquet or **waiting too long** to apply it
- Tourniquet **not 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 — DO NOT LOOSEN**

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Common Mistakes with Tourniquets

- Not using a tourniquet or waiting too long to apply it
- Tourniquet not 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 — DO NOT LOOSEN

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.

Techniques to control bleeding in the child are very similar to what has been presented for adults.

As long as they can be properly applied, the same tourniquet can be used in an adult or a child.

If the child is too small for the tourniquet to be applied properly, direct pressure on the bleeding wound will almost always work to control the bleeding.

Wound packing is the same in both adults and children.

FAQs

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

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These are common concerns. Take the time to review these carefully with your students.

- Impaled objects should be left in place and not removed. The immediate responder could apply a tourniquet above the object. Professional medical personnel, Fire and EMS, are trained to treat impaled objects.
- Improvised tourniquets – notes from slide 34 should be reiterated
- Loss of arm or leg is referring to the fear that a tourniquet could result in the victim losing their arm or leg if the immediate responder places a tourniquet on the victim. Reassure them that placing a tourniquet on a victim will save their life and far outweighs the loss of an extremity. There are studies available regarding length of time of tourniquet placement.
- The scalp contains a vast amount of blood vessels, which can cause the smallest cut to produce a lot of blood. For scalp bleeds, the compress –pressure technique would be used.
- Victims will experience pain with direct pressure, wound packing, and tourniquet application. It is important to manage their expectations regarding all three techniques for controlling bleeding.
- Other questions can and will be asked, please note questions and send to unique questions or questions that you cannot answer to STB staff to provide a response for you and for future course updates.

STATION PRACTICE

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Lets apply the skills we just learned in the tourniquet and leg stations.

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**



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These are the basic principles that should govern your response.

Use this framework throughout the class.

First, make sure the scene is safe. You must ensure your own safety before trying to help someone else.

Next, get help. Call or have someone call 911 for assistance. Make every effort to assure help is on the way as you proceed to the next step.

Look for any bleeding.

Once you have located a source, control of the bleeding will involve the application of direct pressure, the packing of a deep wound , application of a tourniquet, or a combination of all of these techniques.

Other Ways to Help



BLOOD DONATION

Learn more about blood donations in
Canada: [blood.ca](https://www.blood.ca)



ORGAN & TISSUE DONATION

Learn more about organ & tissue
donations in Ontario: [beadonor.ca](https://www.beadonor.ca)

For more information:

STOPTHEBLEED.ORG

STOPTHEBLEED.SUNNYBROOK.CA

The goals of this program were to recognize life-threatening bleeding and to take the appropriate steps to control bleeding until help arrives.

With this training, you can save lives.

Encourage participants to visit stopthebleed.org. This site is maintained by the American College of Surgeons and is updated frequently with new information regarding this important topic.

Kits are available at the Bleeding Control Website and can now be shipped to Canada.

For info on courses in the GTA provided by Sunnybrook HSC please visit stopthebleed.sunnybrook.ca



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

Lastly....

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