Introduction

Bleeding is the number one cause of preventable death from trauma. Stopping blood flow quickly can mean the difference between life and death when someone is suffering from life-threatening bleeding. In an effort to reduce the number of deaths, the White House started the Stop the Bleed campaign in 2015. Since then, Bleeding Control Kits have become more readily available and those, along with trained bystanders, are the first line of defense in treating life-threatening bleeding due to work, home, and vehicle accidents, as well as mass casualty events and natural disasters.
Recognizing Life-Threatening Bleeding

While you should always help someone who is bleeding, identifying when someone is suffering life-threatening bleeding is key to knowing which items in a Bleeding Control Kit will be most effective. Signs of life-threatening bleeding are:

- Blood spurtting out of the wound
- Bandages soaked with blood
- Clothing soaked with blood
- Blood which won’t stop coming out of the wound
- Blood spurting out of the wound
- Loss of all or part of an arm or leg
- Blood pooling on the ground
- Bleeding where the victim is confused or unconscious
Public Access Basic Bleeding Control Kits usually include:

- **A tourniquet** - Tourniquets are applied between the wound and the heart on extremities.
- **Trauma dressing** - Trauma dressing is used to pack a wound
- **Gauze** - Gauze can also be used to pack a wound
- **Nitrile gloves** - Protect the rescuer from contamination from blood and other bodily fluids
- **Trauma shears** - Used to cut packaging open, a patient’s clothing, or other items which may need to be cut.
- **Instructions** - Explain in simple terms and pictures how to use the items contained in the bleeding control kit.

More advanced kits can contain hemostatic dressings which contain a blood clotting agent to aid in stopping blood flow, chest seal dressings and other emergency supplies.

Single and Multi Packs

Bleeding Control Kits are sold in single or multiple units.

Storage

Single bleeding control kits are small enough to be kept in an AED or large first aid cabinet, in vehicles, in larger bags, or personal work spaces such as desks or cabinets.

Cabinets are also available for single or multi-packs of Bleeding Control Kits. Mounted or recessed wall cabinets, when paired with clear signage, offer easy access to these life-saving kits in public areas.
Where are Public Access Bleeding Control Kits Appropriate?

Industrial Settings

If there is a chance for traumatic bleeding as a result of injury caused by machinery, bleeding control kits are recommended. With supplies beyond a basic first aid kit, these specialized items ensure a tourniquet as well as injury-specific instructions are included.

Law Enforcement Vehicles

Law enforcement officers are often the first on scene in emergency situations. Equipping their vehicles with a bleeding control kit in addition to standard first aid kits ensures they will have all the supplies they need in one place without fumbling through a large kit should they respond to a vehicle accident or mass casualty incident.

Schools and Universities

An unfortunate fact of life in America today is the increase in active shooter events at learning institutions. While the odds of it occurring at any particular school or college is slim, being prepared for the worst case scenario could prevent deaths from bullet wounds. In addition, these kits are useful in stemming bleeds as a result of accidents which may occur in shop classrooms where power tools are used by young adults, as well as vehicle accidents on campus.

Large Public Venues

Venues where large numbers of people gather such as stadiums, airports, and concert arenas offer an opportunity for not only active shooter events, but also accidents as the result of structural and equipment failures.

Smaller Public Venues

Churches, movie theaters, dance clubs, and malls have, unfortunately, also been the sites of mass casualty events in recent years.

Family Settings

Homes, boats, shops, farms, cabins, RVs or any place families live, vacation, or work can be the site of a life-threatening bleeding event. In fact, anywhere you would logically keep a standard first aid kit is also a candidate for a bleeding control kit.
Personal Bleeding Control Kits

Bleeding control kits also come in smaller sizes appropriate for individual use and are made to fit in glove compartments, handbags, backpacks and secured on belts.

Who would carry a Personal Bleeding Control Kit?

Their smaller size allows for personal bleeding control kits to go just about anywhere they may be needed. Security guards, first responders, police officers, hikers, and even private citizens may find it gives them peace of mind to have a bleeding control kit at hand should the need arise.

What is in a Personal Bleeding Control Kit?

Since the case for the kit is smaller, there are fewer items in a personal bleeding control kit than in a public access kit. It is meant to be used on only one person suffering trauma. Contents vary by manufacturer, but usually include:

- A SWAT-T or SOF Tourniquet designed for self-application
- One pair of Nitrile Gloves
- One gauze dressing or compression bandage
- One hemostatic dressing

Other items which may be included are small shears for cutting clothing, bandages, or packaging; a small marker pen for noting time of tourniquet application; and other dressings or bandages.

Why would a private citizen carry one?

Accidents happen. Whether you are a citizen who is first on the scene of a vehicle or other accident, a hiker or backpacker who may find themselves in a dangerous situation, or just want to be prepared should the unthinkable happen, a personal bleeding control kit offers peace of mind.
Training

Special training is not required to use a bleeding control kit, although more training centers are offering classes in bleeding control as part of their first aid and/or CPR/AED training. Going beyond basic first aid, bleeding control training teaches responders and laypersons how to assess a scene for safety, find the source of bleeding, apply a tourniquet when appropriate, pack large wounds and use hemostatic dressings. Anyone interested in gaining confidence in these skills is encouraged to seek out this type of training.

Hemostatic Dressings

One of the items contained in the more advanced bleeding control kits are “hemostatic dressings”. These special dressings contain an agent which causes blood to clot. There are two kinds of blood-clotting agents most commonly in use in these products.

Kaolin — An inorganic mineral which accelerates the body’s natural clotting ability and does not generate any heat.

Chitosan — A natural polymer extracted from shrimp shells and highly purified. When they come into contact with blood, chitosan blood clotting granules swell, gel, and stick together to make a gel like plug, without generating any heat.
**Frequently Asked Questions (FAQs)**

I thought tourniquets should not be used because the patient may lose a limb?

In cases of life-threatening bleeding from a limb such as an arm or leg, a tourniquet is the best device to stem the bleeding. Better to lose a limb than lose a life. All tourniquets come with a space to write the time the tourniquet was applied, and most bleeding control kits include a marker to use on the tourniquet. One brand of tourniquet has a built-in timer which requires only a simple push to activate and does not need batteries. Tourniquets should be removed in under an hour if possible - these methods of identifying how long the tourniquet has been applied assists advanced medical professionals to know the condition of the limb when they arrive.

Is there anything in a Bleeding Control Kit which expires?

There are no items in a basic bleeding control kit which expire. Nitrile gloves should probably be replaced every five years or so to be sure they do not tear or break when needed. Advanced kits contain hemostatic dressings which do have an expiration date (typically about five years from the manufacture date) and should be replaced when they expire.

Are tourniquets reusable?

No. Tourniquets used in treating trauma should be disposed of as they may contain blood and other bodily fluid contaminants which cannot be completely cleaned off the device. Tourniquet training devices are reusable for training purposes, and are actually usable in an emergency situation if no other tourniquet is available.

Can you use a bleeding control kit on yourself?

Yes. If you are still conscious and can reach the wound, you should apply as much pressure as you can on the wound. If you have access to a bleeding control kit, you can apply the tourniquet and pack the wound.

Can you use a tourniquet on the torso or head?

No. However, SWAT-T tourniquets can be used as a compression device to hold packing on a wound on the torso to free the hands of a rescuer for other tasks. Multiple S.T.A.T. Smart tourniquets can also be strung together to go around and put pressure on a chest or torso wound.

If a person is bleeding profusely, but has gone into cardiac arrest, what do you attend to first?

This one is a little trickier. If someone is in cardiac arrest they should receive CPR immediately. If there is more than one rescuer available, one person should begin CPR while the other puts pressure on the wound. In the optimum scenario, 3 or more people would be available to help as one could call 911 and get a bleeding control kit and AED while one begins CPR and the other begins wound treatment.

Are all tourniquets one size fits all?

The SWAT-T and the S.T.A.T. Smart Tourniquet can be used on all limb sizes. The CAT tourniquet is only for adults, but there are pediatric versions of that particular configuration which should be used on children and infants.

Can you use a bleeding control kit on an animal?

Yes. All of the items in a bleeding control kit can be used on animals as well as humans, provided the type of tourniquet in the kit can be applied safely and effectively between the wound and the heart on an animal’s limb.