CATASTROPHIC BLEEDING AND TOURNIQUETS

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Catastrophic Bleeding and Tourniquets

Knife crime is an increasing problem.

Every day we hear more heart-rending stories of young lives cut short and families destroyed as a result of this perpetual violence.

If someone has been seriously stabbed and are bleeding from an artery, it is possible for them to lose a critical amount of blood within a very few minutes. It is therefore imperative that more people are aware of the importance of acting fast and know how to help.

First Aid for Life regularly teach these first aid skills in schools and youth clubs and in doing so, are able to highlight to children the dangers of carrying knives.

You are 5 times more likely to be stabbed (usually with your own knife) if you carry a knife – so rather than making them safer, carrying a knife is proven to make young people more at risk.

This booklet will give you a step-by-step guide on recommended first aid advice for responding to a stabbing, making a tourniquet, and dealing with severe bleeding.

Catastrophic Bleeding and Tourniquets

Remember that this is a crime scene. Preserve any evidence and don't interfere with anything or move anything other than what you need to do in order to administer life-saving first aid.

Always ensure the area is safe and you are not in any danger, before commencing any first aid.

Remember to call 999 for an ambulance.

Protect yourself and wear gloves if possible.

Talk to the casualty and quickly establish if there is any response, or if they are unconscious.

If they are unconscious and breathing, put them into the recovery position and treat any obvious bleeding.

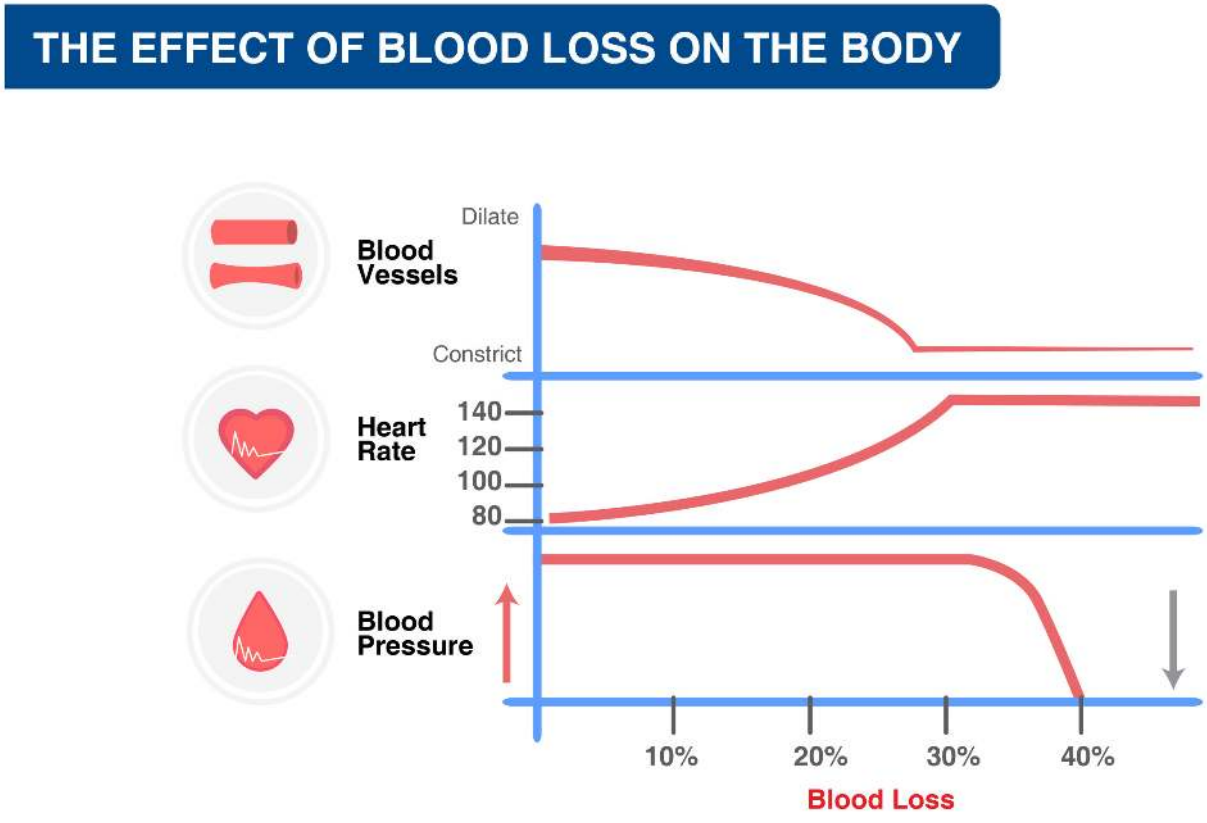
If they are unconscious and not breathing – if there is a life-threatening bleed that you are unable to stop with direct pressure – then this is a catastrophic bleed and is a priority over resuscitation. If there is no obvious pulsating bleed, and they are unconscious and not breathing – then call for an ambulance (and a defibrillator) and commence CPR immediately.

Bleeding can be external (bleeding from an artery or vein) or internal (bleeding into a body cavity).

For an external bleed: Bleeding from a major artery will result in bright red frothy blood that pulsates from the body – this is extremely serious and is a potentially catastrophic bleed. This sort of bleed can kill someone in just a few minutes.

Bleeding from a major vein can also prove fatal, the blood tends to be deep red and flows rather than pulsates. A venous bleed may be easier to stop.

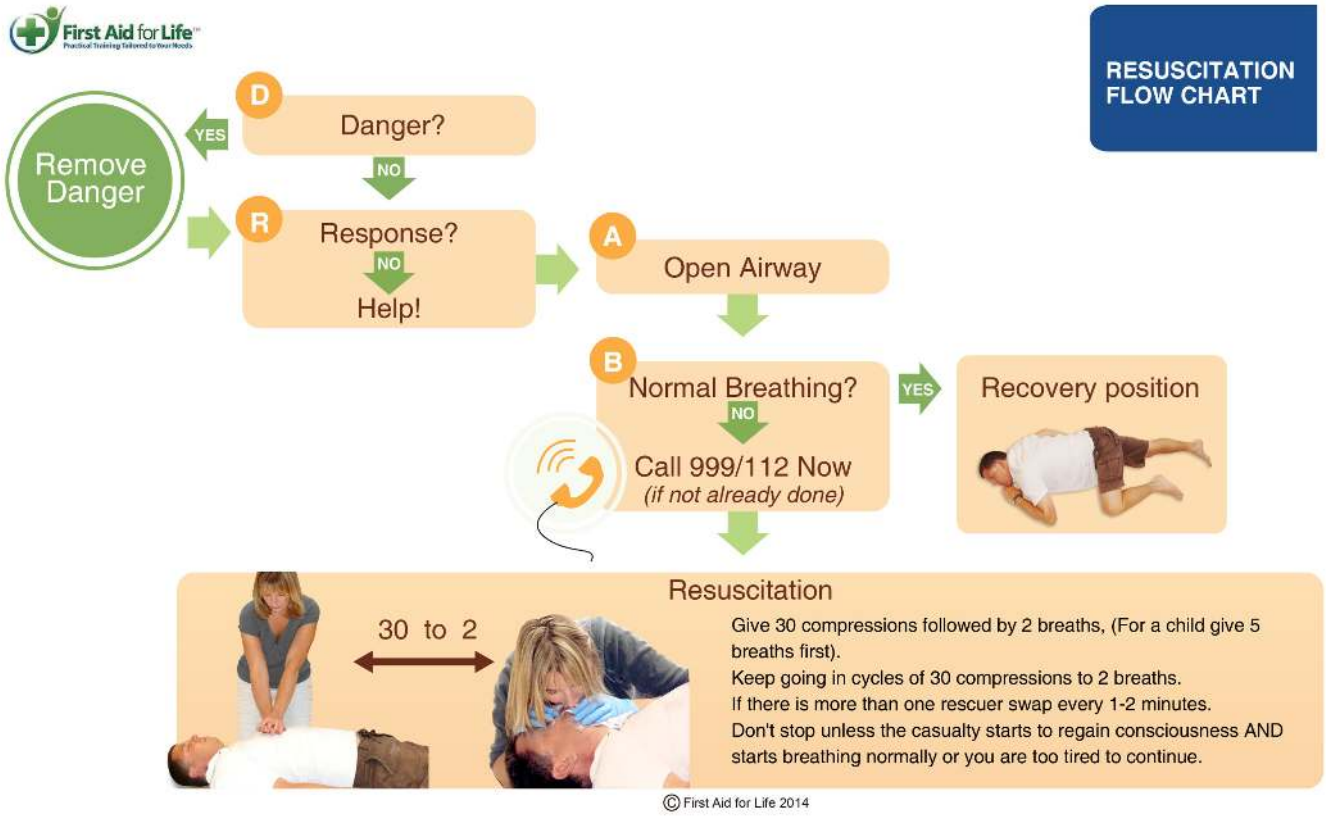
The European Resuscitation Council guidelines on catastrophic bleeding 2015 state that tourniquets and haemostatic dressings are indicated only once direct pressure has been tried and been insufficient. Direct pressure to the site of the wound is always the initial first aid intervention of choice for a community first aider.



- Wear gloves or take measures to protect yourself from blood contamination.
- Sit or lie the person down – to manage shock and prevent them from feeling dizzy and faint – for a serious bleed, help them lie down and elevate their legs.
- Examine the area to see if there is anything stuck in the wound – if so, do not remove it as it is likely to be stemming bleeding, apply direct pressure either side of the object. Most perpetrators do not leave the weapon in the victim.
- Elevate the bleeding area above the level of the heart to slow down the bleeding (although latest guidelines no longer recommend elevation as this alone will not stop bleeding, stressing direct pressure is more important). New studies have now reinforced medical experience demonstrating that elevation is helpful when attempting to control bleeding.
- Pressure – apply direct pressure on the wound to stop the blood coming out.
- Dress the wound with an appropriate non-adherent dressing.

Further points to remember when treating a victim of serious bleeding

- Apply direct pressure to try and control bleeding – if the bleeding can be controlled with pressure, keep holding for 10 minutes as it takes this amount of time for clots to form.
- Keep checking their vital signs, level of consciousness and breathing – expect that they may deteriorate.
- Ensure the emergency services – ambulance and police have been informed.
- If the casualty stops breathing, start CPR immediately as you have managed to control the bleeding



Catastrophic bleeding is when blood loss is more important than CPR

Most bleeds can be controlled with direct pressure. However, with a catastrophic bleed, the casualty can lose a critical amount of blood in just 3 minutes.

With an external catastrophic bleed there will be a lot of blood. If the bleed is in a limb and you are unable to stop the bleeding with substantial direct pressure, you may need a tourniquet.

Packing a wound

If the bleed is in the trunk of their body, you may need to locate the source of the bleeding by placing your finger or hand into the bleeding cavity. Once you have identified the source of bleeding, the cavity needs to be packed with an improvised or ideally a commercial sterile haemostatic dressing.

Treating a sucking chest wound

To treat an open chest wound – the previously recommended training of occlusive dressings secured on 3 sides, is no longer advised. Instead, just leave the wound open and control any bleeding with direct pressure or a non-occlusive dressing.

If someone is bleeding from their limb and the bleed is pulsating and unable to be stopped with direct pressure, it is recommended that you use a tourniquet. Tourniquets are tights bands used to control bleeding after an injury. A commercial tourniquet will undoubtedly be more effective and easier to use, however an improvised tourniquet will still work and save lives.

How to make an improvised tourniquet

One of the easiest ways to make an improvised tourniquet from the contents of a standard first aid kit is to use a triangular bandage folded into a broad fold bandage and to tighten the tourniquet using scissors as a windlass. If you have access to cutlery, such as a table knife, this would be even better as otherwise you no longer have your scissors available to use.

Please note: A tourniquet should be at least 4cm wide to prevent localised damage to nerve tissues.

· Tie the bandage as quickly and tightly as possible around the bare limb.

· The tourniquet should be 5-7cm above the wound. Never place a tourniquet over a joint. Put the tourniquet on as tightly as you can, this will be extremely painful for the casualty, but is necessary to stop the bleeding and potentially save their life.

Ensure someone has called 999/112 for help.

· Note the exact time of the application and write this prominently on the tourniquet if possible.

· NEVER release the tourniquet yourself. This should only be done by a healthcare professional in a controlled environment.

If there's a clean cut through an artery, for example in a deep incised wound, the artery could contract back up the arm or leg. This is why you should place the tourniquet at least 5 -7cms (or 2 inches) above the wound.

You may find other guidance on the positioning of a tourniquet, such as applying the first tourniquet mid-point over a single bone. This advice is also acceptable, so long as you position the tourniquet proximal to the wound (closer to the trunk of the body). Previous advice was that tourniquets could only be placed on single bones. It is now known that this is not the case and tourniquets should be placed on lower limbs, if that is where the wound is located.

1. Knot the bandage around the bare limb 5-7cm above the wound.

2. Place the knife or your scissors on top of the knot and tie another knot on top of them.

2. Use the knife or your scissors as a windlass to wind round and tighten the tourniquet. Tighten the tourniquet until the life-threatening bleeding stops. This will be extremely painful to the casualty, explain to the casualty that this is vital to save their life. If the bleeding will not stop; try tightening the tourniquet further or apply a second above the first one. Slight bleeding may still continue, but the life-threatening bleeding should be controlled.

3. The windlass can be secured either by tying another triangular bandage to stop it unwinding or by wrapping and tying both ends of the triangular bandage around the ends of the windlass to ensure it remains in place.

4. Note the time

It is important to note the exact time that the tourniquet was applied and to arrange for urgent transfer for medical help, ensure you tell them where and when the tourniquet was applied.

5. Ensure the tourniquet has been put on tightly enough

Please note it will be extremely painful for the casualty to have a tourniquet applied, but it is absolutely vital that the tourniquet is applied tightly enough to entirely stop the bleeding. If a tourniquet is not on tightly enough it can make things worse as it may occlude the veins. In turn, bleeding arteries may be harder to stop as they are less easy to reach. If the venous return is stopped by the tourniquet, the only place for blood to come out is from the wound.

6. A tourniquet should only be removed by a doctor in a hospital environment

NEVER be tempted to loosen or remove a tourniquet. Once applied, tourniquets should only ever be removed by a doctor in a hospital setting. Removing a tourniquet outside of a hospital setting is likely to be fatal as accumulated toxins flood the bloodstream.

Unsuitable alternatives for an improvised tourniquet

A tie is likely to be too thin. A leather belt is also unsuitable as it is too tough and rigid to use with a windlass; you will be unable to provide sufficient force by hand to tighten it sufficiently to provide enough pressure to stop the blood flow.

A tourniquet should be at least 4cm wide to prevent localised damage to nerves tissues.

A tourniquet must be put on sufficiently tightly to stop the bleeding. If it is not tight enough it can actually result in more blood loss. It may be necessary to apply more than one tourniquet to completely stop bleeding.

It is important for the doctor treating the casualty to have a good understanding of how long the tourniquet has been applied for. Write the time the tourniquet was applied onto the tourniquet itself or onto the casualty.

Please remember that although tourniquets can save lives, their use should not be taken lightly. They remain a second-line treatment when direct pressure is not possible or insufficient to control bleeding.

It is strongly advised that you attend a fully regulated Practical or Online First Aid course to understand what to do in a medical emergency. Please visit https://firstaidforlife.org.uk or call 0208 675 4036 for more information about our courses.

First Aid for Life is a multi-award-winning, fully regulated first aid training provider. Our trainers are highly experienced medical, health and emergency services professionals who will tailor the training to your needs. Courses for groups or individuals at our venue or yours.

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First Aid for Life™
The First Aid Experts

First Aid for Life's Street Crime First Aid course covers both general first aid and first aid common to street crime cases, including CPR, the recovery position and how to treat a stab wound. The course can be run at your venue anywhere in the UK or at our company headquarters in Balham, London. We have taught this course to young people and youth workers in numerous organisations, including youth clubs, holiday clubs, schools, prisons, YOTs and PRUs. The feedback and engagement has been extraordinary.

https://onlinefirstaid.com/our-courses/catastrophic-bleeding-first-aid-course/.

First Aid for violent street crime including bleeding from knife & gun wounds and acid attacks

First Aid for Life™
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Short course

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Bespoke courses nationwide

Taught by experienced experts

Specialist first aid course covering first aid for an unconscious adult, care of serious and catastrophic bleeding using improvised and manufactured bleed kits. Can also include first aid for acid attack injuries and other elements such as drug and alcohol poisoning as well as more general first aid topics. With the aim of reducing weapon carrying and preventing street crime.

Benefits:

- Empowers attendees with the skills to save lives
- Makes them more risk-aware
- Reinforces dangers of carrying weapons
- Teaches skills to help themselves or others in a life-threatening emergency.
- Supports Government Violence and Vulnerability goals

- ✔ **Trainers are highly experienced, DBS checked, healthcare, military medics and emergency services professionals**
- ✔ **Leading UK first aid training company for bleeding and violent street crime.**
- ✔ **Free comprehensive first aid manual & handouts**
- ✔ **Experienced teaching young people and youth workers working with PRUs, YOTs and children with a variety of additional needs.**
- ✔ **Providing award-winning first aid training since 2007**

We will adapt any of the content to suit your needs and adjust time required for the course accordingly.

Suggested Course Content:

Accident prevention and approaching the scene
Recovery position
CPR
What to do in an emergency
Impact of drugs and alcohol
Break
Bleeds - minor & major
Catastrophic bleeding and use of manufactured and improvised tourniquets
Bleed kits
Packing a wound
Head and spinal injuries
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