

Knife crime and stabbings – First aid training to reduce fatalities

With knife crime on the rise and increasing fatalities and injuries among young people, Emma Hammett explains how teaching first aid skills in schools can help reduce fatalities and combat knife-carrying.

2018 was the fourth-worst year on record for knife deaths among under-20s in England and Wales (Younge and Barr, 2018). Incidences rose by a full 8% and parents, teachers and children are understandably, becoming increasingly concerned about the threat of stabbing (Office for National Statistics, 2019). Children and young people are particularly at risk, 10–17-year-olds constitute around 20% of those cautioned or convicted of knife offences (which include possession of a knife, or threatening someone with one) (Shaw, 2018).

The vast majority of these crimes take place in or around school

Furthermore, a Freedom of Information request involving police forces in 2017 showed a 20% increase on the previous year for knives found in schools (Shaw, 2018).

It is vital that all schools actively participate in educating children about the dangers of carrying knives, this needs to begin at primary school. According to the police, people are up to three times more likely to be stabbed if they go out carrying a knife.

Remember too, that stabbings do not only occur with knives. Damilola Taylor was a 10-year-old who bled to death in Peckham after being stabbed in the leg with a broken bottle.

For many of these stabbings, immediate and appropriate first aid can be pivotal to the victim's survival.

Emma Hammett, registered nurse and founder and CEO of First Aid for Life

Government action

Sadiq Khan, Mayor of London, has acknowledged that 'to really make significant progress [reducing knife crime] can take up to ten years' (Greater London Authority, 2019a). City Hall is recognising the importance of prevention and a public health approach. Sadiq Khan has committed to working with schools and other services, such as youth clubs to address the problem (Greater London Authority, 2019b). These preventative measures are important and can lead to real change (as seen in Glasgow, the city upon which Khan is modelling his approach). However, it also means that schools and parents must recognise the reality of a continued stabbings threat for the foreseeable future.

How do victims die?

Victims of stabbing, if they die, tend to do so from a pierced organ, or a catastrophic amount of internal or external bleeding. Stabbings are often erratic and poorly targeted. This is because the perpetrators are often in a rush, striking out in anger rather than specifically aiming to kill someone.

Does first aid help?

Basic knowledge can save lives. Last October, a teenage scout from South London used her first aid skills to treat multiple stab wounds on a victim she encountered in 2018. Lois Mulhall had known to apply pressure to the wound, keep the victim calm, and to call 999 due to first aid training she had taken as part of her Duke of Edinburgh award (Davis and Shepard, 2018).

The basic principles of treating a bleeding wound are not difficult to grasp. If all children were equipped with such knowledge, it is possible that many lives could be saved.

What can schools do?

There are many organisations able to help schools in the fight against knife crime. First aid training for schools run by specialist trainers with backgrounds as paramedics, military medics or firearms officers, using real examples drawn from their own vast experience can help ensure the training hits home acting as an active deterrent in preventing young people carrying knives in the first place. Equipping young people with the skills to help empowers them to be more risk aware and think carefully as to what they are involved with.

First aid following a stabbing

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

Talk to the casualty and quickly establish 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.

How to stop bleeding

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

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

- 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 the 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 (Du Pont et al, 2018).
 - Pressure—apply direct pressure on the wound to stop the blood coming out.
 - Dress the wound with an appropriate non-adherent dressing.
 - Keep the casualty warm and reassure them.
- 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.

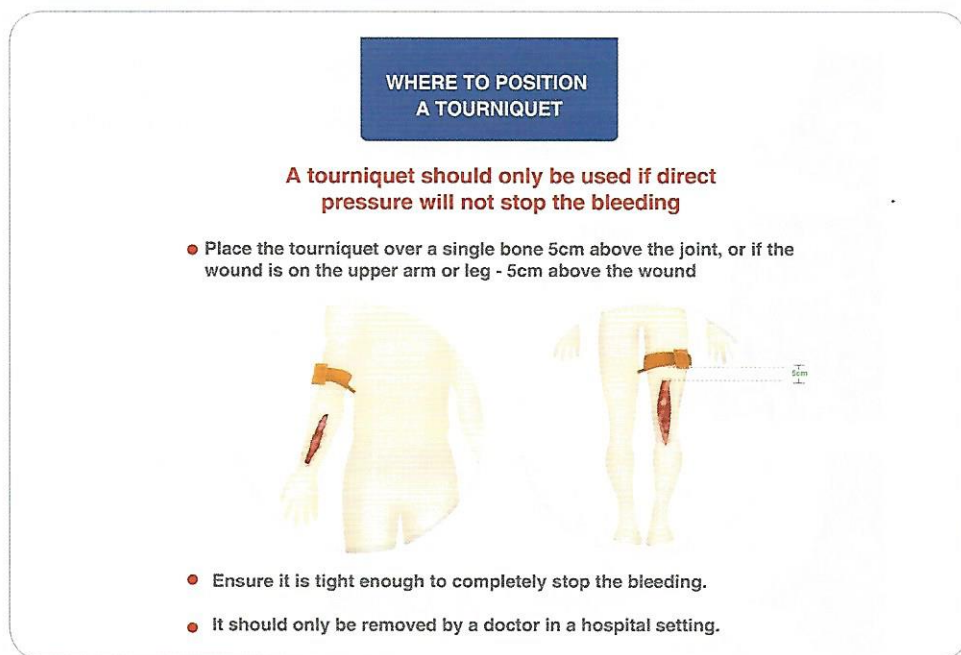


Figure 1. Where to position a tourniquet

- Ensure the emergency services—ambulance and police have been informed.

Catastrophic bleeding

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.

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.

To treat an open chest wound the previously recommended training of occlusive dressings secured on three sides is no longer advised. Instead, just leave the wound open and control any bleeding with direct pressure or a non-occlusive dressing (Zideman et al, 2015).

Tourniquets

If someone is bleeding from their limb and the bleed is pulsating and unable to

be stopped with direct pressure—then it is recommended that you use a tourniquet (see Figure 1). A commercial tourniquet will undoubtedly be more effective; however, if specific rules are followed an improvised tourniquet could potentially save lives. The results of a 2012 study found that almost a quarter of deaths in the wars in Iraq and Afghanistan were ‘potentially survivable’, and 90% of deaths overall occurred before the casualty could be treated at a medical centre (Horn, 2015). The study also found that 90% of victims with potentially survivable wounds die specifically from ‘uncontrolled’ blood loss.

How to use 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 (see Figure 2). 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 4 cm wide to prevent localised damage to nerve tissues.

- Tie the bandage around the bare limb on a single bone (i.e. if the lower part of the arm or leg are bleeding, you should tie



1. Place the cutlery or your scissors on top of the knot and tie another knot on top of them



2. Use the cutlery or your scissors as a windlass to wind round and tighten the tourniquet



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

Figure 2. Using an improvised tourniquet

the tourniquet on the upper part, where there is only one bone rather than two).

■ The tourniquet should be at least 5 cm above the wound, or 5 cm above the joint if the wound is on the lower limb. Never place a tourniquet over a joint.

If there is a clean cut through an artery, for example in a deep incised wound, the artery can contract back up the arm or leg. This is why you should place the tourniquet at least 5 cm (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 the tourniquet is positioned proximal to the wound (closer to the trunk of the body).

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.

Please note it will be extremely painful for the casualty to have a tourniquet, but it is absolutely vital that the tourniquet is applied tight enough to entirely stop the bleeding.

If it is not tight enough, it can actually

result in increasing blood loss. It may be necessary to apply more than one tourniquet to completely stop bleeding. If a tourniquet is not on tight enough it can occlude the veins, but arteries may be harder to stop as they are less easy to get to and if the venous return is stopped by the tourniquet, the only place for blood to come out is from the wound.

Never be tempted to loosen or remove a tourniquet. Once applied, tourniquets should only ever be removed by a doctor in a hospital setting.

Unsuitable but tempting alternatives for an improvised tourniquet

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

Please remember that although

Further information

First Aid for Life

For more information for more information about on its specialist first aid support for schools and courses, including free resources to teach children, visit: www.firstaidforlife.org.uk or contact emma@firstaidforlife.org.uk or on 0208 675 4036

First Aid for life provides this information for guidance and it is not in any way a substitute for medical advice. First Aid for Life and BJSN are not responsible or liable for any diagnosis made, or actions taken based on this information.

European Resuscitation Council

European Resuscitation Council Guidelines for Resuscitation 2015 Section 9. First aid. <https://ercguidelines.elsevierresource.com/european-resuscitation-council-guidelines-resuscitation-2015-section-9-first-aid/fulltext>

Word 4 Weapons

For more information on the weapon surrender charity and the knife bins, visit the website at: <https://www.word4weapons.co.uk/>

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.

Equipping all children from key stage 2 upwards with basic life support skills and the knowledge to help themselves or others in a medical emergency will save lives. They love the practical nature of the learning and if it also makes them think twice before equipping themselves with knives, then it really is an obvious step forward in the fight to reduce fatalities from stabbing.

BJSN

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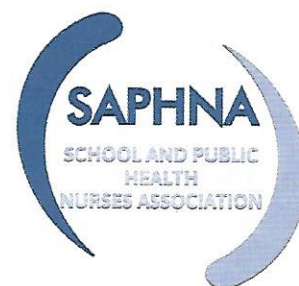
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