

# Life-Threatening Bleeding

## Position Statement

01/10/2024



### Background

Bleeding is one of the preventable causes of death in victims of trauma. It is possible to rapidly die from bleeding – before the arrival of emergency services – making the immediate control of life-threatening bleeding a critical skill for first aid<sup>1</sup>.

Life-threatening bleeding may be rapidly flowing or spurting blood from a wound, pooling of blood on the ground, or bleeding that cannot be controlled by direct manual pressure alone. Although direct manual pressure is the gold standard for the initial control of bleeding, the use of tourniquets and wound packing may be required for life-threatening bleeding in the first aid setting<sup>1</sup>.

The Health and Safety Executive recommend the syllabus for Emergency First Aid at Work and First Aid at Work training.<sup>2</sup> Whilst 'administering first aid to a casualty who is wounded and bleeding' is included in the Emergency First Aid at Work syllabus, the application of tourniquets, wound packing and using haemostatic dressings for life-threatening bleeding are listed as potential additional training needs.

The skills and materials required for applying a tourniquet and packing a wound can be separated into 'improvised' and 'manufactured'. The table below gives examples:

	<b>Tourniquet</b>	<b>Wound packing</b>
<b>Purpose</b>	For life-threatening bleeding from an arm or leg that cannot be controlled by direct manual pressure.	For life-threatening bleeding from a deep wound that cannot be controlled by direct manual pressure.
<b>Improvised</b>	Applied using improvised materials, such as a triangular bandage wrapped around a limb and tightened with an improvised twisting device, such as cutlery.	Material is packed tightly into the wound to apply pressure within it to control the bleeding. Material such as bandages from a first aid kit or clothing could be used to pack the wound.
<b>Manufactured</b>	A commercially manufactured tourniquet is applied around a limb to stop blood flow and control the life-threatening bleeding.	A haemostatic dressing is used to pack the wound. Haemostatic dressings are impregnated with an agent that rapidly and safely clots blood.

## First Aid Quality Partnership Recommendations:

- First aid training providers should teach the application of an improvised tourniquet and improvised wound packing for life-threatening bleeding on First Aid at Work courses.
- Employers that identify workplace hazards with a specific risk of life-threatening bleeding should follow [HSE guidance](#) and the use of **manufactured** tourniquets and haemostatic dressings would be appropriate. Employers should confirm with their first aid training provider that the application of **manufactured** tourniquets and haemostatic techniques are included in training and assessment in addition to the standard first aid syllabus.

### Notes on recommendation:

Whilst feedback from learners of all backgrounds has been overwhelmingly positive, it is also accepted that certain cohorts of learners may not require these additional skills. Some training providers may wish to teach tourniquets and wound packing (improvised and/or manufactured) on emergency first aid at work courses – the above recommendation does not prevent this and is in addition to the standard emergency first aid at work syllabus.

## References

1. Zideman, D.A., Singletary, E.M., Borra, V., Cassan, P., Cimpoesu, C.D., De Buck, E., Djärv, T., Handley, A.J., Klaassen, B., Meyran, D., Oliver, E. and Poole, K. 2021. European Resuscitation Council Guidelines 2021: First aid. *Resuscitation*. 161, pp.270–290.
2. HEALTH AND SAFETY EXECUTIVE, 2024. *First Aid at Work The Health and Safety (First-Aid) Regulations 1981*. 3rd edition edn. <https://www.hse.gov.uk/pubns/priced/l74.pdf>