



THE UKRAINE TRAUMA PROJECT

[March 2, 2023]

The Ukraine Trauma Project is a collaboration between UCD's Centre for Emergency Medical Science (UCD CEMS) and two charities: the UCD Foundation and the Association of Ukrainians in Ireland. We are looking for your support urgently. Thank you for reading this.

Analysis of trauma data from recent military conflicts shows that over a third of all combat deaths, and approximately 80% of all preventable combat deaths are due to severe haemorrhage^{1,2}.

Tactical Combat Casualty Care (TCCC) is a model of emergency pre-hospital care (supported by formal training programmes) that has been developed by the U.S. Department of Defense to provide effective, evidence-based, life-saving interventions on the battlefield. Over the last decade, TCC appears to have had a significant impact on preventing deaths – mainly as a result of better immediate haemorrhage control³. These interventions have been widely adopted by advanced military emergency paramedical personnel, including those working in the Irish Defence Forces (IDF).

The priority interventions to control massive bleeding include the use of tourniquets, wound-packing and pressure dressings. Another key intervention is the administration of tranexamic acid (TXA)⁴. While TXA is a safe and effective medicine, it must be delivered as early as possible (as it is most effective within the first hour and ineffective after three hours) by intravenous (IV) or intraosseous (IO) routes. IV access may prove very difficult to achieve in severely injured persons on a battlefield, IO access, however, can nearly always be achieved within 60-90 seconds of arriving paramedical staff who have been specially trained in this technique; special equipment is needed for IO access.

In Ireland, advanced paramedics from all statutory ambulance services have been administering TXA for a decade, using both IV and IO routes. UCD CEMS has played a key national role in providing this training, and has also provided this training to IDF advanced paramedics.

It is of note that the Ukrainian military medical services have a wide range of capabilities but do not currently have the facility to deliver TXA immediately after combat injuries. In this context UCD CEMS has been approached by some Ukrainian authorities to assist in the establishment of a capability within Ukrainian military medicine to deliver TXA within a time-critical period (optimally 30 minutes) after combat injury and to embed the capacity for cascade training. A pilot first phase has already been performed in Ukraine with excellent feedback. It

is important to note that these pre-hospital emergency interventions are to treat all casualties of the war (both military and civilian) and, as such, the training is relevant to both military and civilian emergency medical services.

A substantive project is now being planned to (a) establish a “train the trainer programme” – both virtual and on-site (b) provide a supply of standardised kits containing the equipment needed to obtain IO and/or IV access and to deliver TXA (c) provide other emergency pre-hospital kit and training as requested (d) collect and evaluate feedback/data (effectiveness/uptake of training, roll-out of kits, capability and use of TXA).

To do this, there is a need to raise funds. In this context we would be most grateful for any financial support that you can provide. Donations can be made at <https://mysplink.com/ucdfoundation/ukrainetraumafund> or by scanning the QR code below. Thank you for your support.



<https://www.ucdfoundation.ie/donate>

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Practical demonstration with Ukrainian colleagues



Emergency kit & supplies