

Purse maintains logistics and supply chain to ensure readiness for rapid deployment.

**Conclusion:** Samaritan's Purse stands ready to deploy Mobile Surgical Teams into complex disaster scenarios. The rapid and nimble nature of the MST ensures delivery of quality lifesaving care into areas and timeframes previously unmet through traditional disaster response mechanisms.

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### Development, Implementation, and Evaluation of Novel Pediatric Trauma Education During War: Pediatric Trauma Fundamentals Training in Ukraine

David Mills MD, MPH<sup>1,2,3</sup>, Alexis Schmid DNP, MSN, MPH<sup>2,3</sup>, David Lewander MPH<sup>2</sup>, Michelle Gonnet MD<sup>4</sup>, Oleksii Lopatniuk<sup>5</sup>, Oleksandra Demetska PhD<sup>5</sup>, Olena Sorokina MD<sup>6</sup>, Anna Bolonska MD<sup>6</sup>

1. University of California San Diego School of Medicine, La Jolla, CA, United States
2. Boston Children's Hospital, Boston, MA, United States
3. Harvard Humanitarian Initiative, Cambridge, MA, United States
4. International Medical Corps, Los Angeles, CA, United States
5. International Medical Corps, Kyiv, Ukraine
6. Dnipro State Medical University, Dnipro, Ukraine

**Background/Introduction:** In February 2022, Russia launched an offensive in Ukraine, resulting in significant casualties to civilians, including children. As part of an academic/NGO partnership, a novel pediatric trauma fundamentals course (PTF) was developed to provide pediatric trauma education to frontline healthcare providers across Ukraine.

**Objectives:** The objective of the program was to develop, implement, and evaluate a novel PTF educational course in the active conflict zone of Ukraine.

**Method/Description:** A two-day PTF course was internally developed and implemented in Ukraine from November 2022 to December 2024. Training effectiveness was assessed using the RE-AIM framework. Participants completed pre- and post- assessments in knowledge and self-confidence and critical skills were assessed against objective skill checklists. Change in knowledge and self-confidence were analyzed, respectively, with the nonparametric Wilcoxon matched-pairs signed rank test and McNemar's test for paired data. Anonymous course evaluations were solicited after each course. Six-week follow up surveys assessed skill utilization and stewardship.

**Results/Outcomes:** 446 Ukrainian healthcare providers were trained during 30 courses across eight oblasts in Ukraine during the intervention period. Aggregated knowledge and self-confidence significantly improved across all measures. Ukrainian instructors received higher scores on instructor evaluations compared to international instructors. Six-week follow-up surveys demonstrated participants had positive views of the training, used the training on patients, and taught the material to others.

**Conclusion:** Our PTF course implementation demonstrates a successful partnership-based model for implementing pediatric

trauma education in an active conflict zone. Implementation challenges can be mitigated through partnership-based models between academic institutions and organizations with local implementation expertise.

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### Stopping the Bleed: Can Just-in-Time Training Improve the Tourniquet Application Competencies of Bystanders and First Responders? – A Randomized Control Trial

Roxanne Tajbakhsh MBChB, BSc, MScDM<sup>1</sup>, Eric S Weinstein MD, MScDM<sup>2,3</sup>, Jeffery M Franc MD, MSc, FCF-PEM<sup>2,4</sup>

1. Whitecross Medical Officer and Tamaki Health Clinical Health Education Coordinator, Auckland, New Zealand
2. CRIMEDIM-Center for Research and Training in Disaster Medicine, Humanitarian Aid and Global Health, Novara, Novara, Italy
3. Department of Emergency Medicine, University of South Florida Morsani College of Medicine, Tampa, FL, United States
4. Department of Emergency Medicine, University of Alberta, Edmonton, Alberta, Canada

**Background/Introduction:** Public education in effective interventions for external hemorrhage control for gunshot wounds has become a priority focus. There remains a gap in training programs of populations of non-medical bystanders who would be the first to stop this bleeding in a mass shooting.

**Objectives:** To create a WHO EMT initiative community training program designed to close this gap in low-middle income countries, complex humanitarian events and in conflict zones.

**Method/Description:** This study is a factorial randomized control study, utilizing four cohort groups. Two comprised of bystanders with no previous medical training, and the remaining two comprised of first responders previously trained to control external hemorrhage. Each group was put through the same hemorrhage control simulation; one cohort of each bystander/first responder groups acted as a respective control group receiving only a tourniquet, whereas other cohorts of each group received Stop-the-Bleed<sup>®</sup> handouts to serve as the point-of-care instructional method of Just-in-Time training alongside the tourniquets.

**Results/Outcomes:** Within the bystander's cohort, 26.3% of the group who received JiT training applied the tourniquet correctly vs 6.3% of the control group.

Of the first responder's cohort, 75% of those who received JiT training applied the tourniquet correctly vs 66.7% of the control group.

There was no statistically significant difference in the ability to correctly apply the tourniquet in the intervention vs control groups of either cohort.

**Conclusion:** The WHO EMT initiative has the opportunity to train non-medical bystanders to receive Just-in-Time training to effectively place a tourniquet to stop the bleeding after a mass shooting.

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