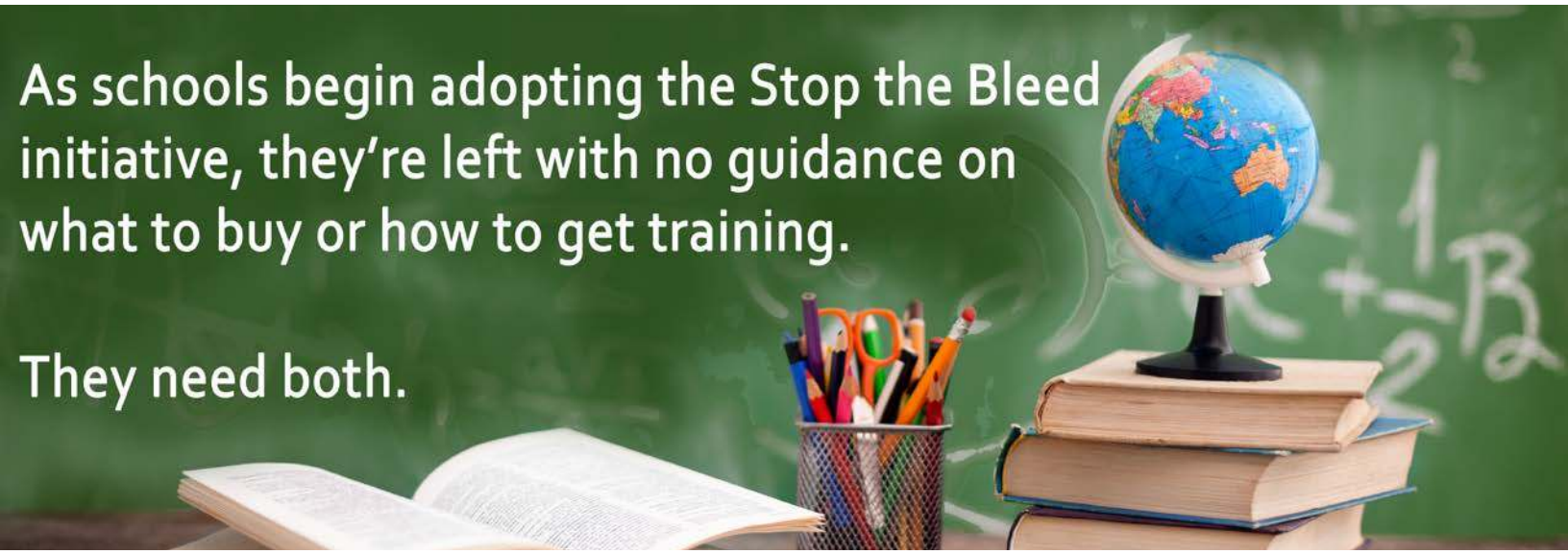
CRISIS MEDICINE



Stop the Bleed was designed to encourage bystanders to gain training in hemorrhage control. As schools have learned about this initiative, they have begun adding medical supplies and training to their school hardening plans. Many schools, however, have fallen prey to not knowing what equipment to purchase or what training to obtain.

Recently, we learned a school district in Florida bought 800 counterfeit tourniquets. The FDA describes these as dangerous and recommends destroying them. These knock-offs are not made to any recognized standard; the plastic is flimsy, the stitching pulls out, and they have broken during emergencies when applied to wounded.

We also learned our own child's school bought cheap knock-off tourniquets initially, only to have to pay for the real thing after they received proper training and advice.

Buying tourniquets can be confusing. Surprisingly, just because a tourniquet has FDA approval doesn't mean it has any evidence it will stop significant bleeding. The Department of Defense's TCCC committee recommends several tourniquets with evidence supporting their efficacy. Even among those tourniquets, some have more evidence supporting their use. If you're not using one of the TCCC recommended tourniquets, then you're using one with no good evidence it works. Additionally, it is very difficult to pick out the genuine tourniquet from a cheap knockoff. Don't select life-saving equipment based on cost or appearance.

Currently, the only TCCC recommended tourniquets are:

- Combat Application Tourniquet (C-A-T) Gen 7 and Gen 6
- SOF Tactical Tourniquet – Wide (SOFT-W)
- Tactical Mechanical Tourniquet (TMT)
- Ratcheting Medical Tourniquet -Tactical (RMT-T)
- SAM Extremity Tourniquet (SAM-XT)

Medical evidence shows tourniquets are only 70% effective on thighs. You need to learn the next step in the plan. Placing two tourniquets side-by-side increases their effectiveness by 10%. If that still isn't working, you need to know how to pack a wound. We know this is scary information.

The best way to avoid getting counterfeit or unproven tourniquets is to get educated first. To create a cohesive treatment plan, you need both good equipment and good training to learn how best to use it.

The first time you see a critically wounded person should not be when you are trying to render aid to a student or your colleague.

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Expecting First Responders to be there to manage massive hemorrhage is not enough. A casualty can bleed to death in less than five minutes; average EMS times are too long. If you are not prepared to help, you will watch the casualty die.

You need to check the credentials of who is providing your training. Former military instructors may not be able to adequately explain what is best for teachers, sharing only dogma they were taught. EMS instructors may not understand the limitations of providing care during an active event. You need training that combines a nuanced knowledge of the best equipment for your environment and your personnel, who will be operating under extremely stressful circumstances.

An extremity wound, no matter how devastating, is survivable if properly managed. Buying tourniquets without learning how to use them will slow your care.

It's hard to find time to add one more training to your teachers' schedules. However, a Crisis Medicine course is offered online, self-paced, and offers a comprehensive plan to care for casualties.

Organizing care around a simple mneumonic, students learn a plan to apply medical training during an ongoing, dangerous event.

Learn proper selection and application of tourniquets, which tourniquets have been shown to be the most effective, and how to maximize the success of applying a tourniquet. Receive an introduction to packing life-threatening wounds that can't be tourniqueted. Other topics covered include: recognition of airway issues, an understanding of chest injuries, and a simple scheme for triage. Additionally, learn the importance of keeping casualties warm and the impact of hypothermia on mortality.

The Instructor and Owner of Crisis Medicine, Mike Shertz, MD/18D

An Emergency Medicine physician can teach you the science. A former special-operations veteran can tell you what works. Mike Shertz, MD-18D can do both. With 20 years experience in the Emergency Department and leading EMS and fire as well as 32 years of tactical medical experience as a Special Forces Medic and embedded law enforcement tactical medic. This comprehensive, science-informed, training better prepares everyone to manage injured in high-risk environments. Using a combination of current and historical events, Dr. Shertz's lectures demystify the how, why, when to use each emergency medical procedure you need to become a Force Multiplier for Good.