Army doctor promotes use of tourniquets among domestic first responders

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An Army Reserve doctor and nationally recognized trauma surgeon is pressing for broader availability of tourniquets — in the pockets of every U.S. first responder and staged alongside portable defibrillators in offices, shopping malls and elsewhere.

Lt. Col. David King is the Massachusetts General Hospital surgeon who finished the Boston Marathon in 2013 and 30 minutes later found himself treating runners and spectators critically wounded in the April 15 bombings by brothers Tamerlan and Dzhokhar Tsarnaev.

Following the attack, King, who has been recognized by President Obama and Vice President Joe Biden for his work that day and after, has pushed for widespread instruction on tourniquet use and increased accessibility — in defiance of commonly held first aid tenets that tourniquets should be applied only by trained medical personnel.

"What struck me [in Boston] is that many emergency medical services responders don’t have tourniquets. That needs to change. A T-shirt with a knot in it doesn’t work," King told Military Times in an interview earlier this year.

King wants tourniquet familiarization to become as commonplace as CPR or the Heimlich maneuver. He even has posted a YouTube how-to video on the correct application of tourniquets.

It appears someone is listening.

The White House’s National Security Council staff has assembled a team of 50 public health experts, including government, private-sector and nonprofit representatives to promote national first aid proficiency, with a focus on emergency response and hemorrhage control.

Dr. Richard Hunt, director of medical preparedness policy for the council, said those who reach victims first after an accident or event...
usually are bystanders. Empowering them to treat the injured, he says, can save lives.

"Bystanders have played critical roles in emergent threats, things we already face, bombings, active shooters. ... The purpose of our group is to identify actions and tools the general public at large can use to save lives," Hunt said in a call Tuesday with reporters during the 2014 Military Health System Research Symposium.

The focus on tourniquet use stems largely from lessons learned in Iraq and Afghanistan. Drawing on medical response techniques honed by Special Forces troops in combat, the military has instituted several changes in treating combat injuries — to include a requirement that patrolling service members carry at least one, if not two, tourniquets.

The NSC committee is examining the military's Tactical Combat Casualty Care initiative to determine how members of the general public can benefit from it.

"We believe a strong foundation of everyday resilience for emergencies is really important. We have evidence telling us that bystanders will react, so given that, we see that by providing tools for the general public we can build on community members' willingness to engage and act," Hunt said.

Tourniquets are a centuries-old medical treatment that have not been widely taught to nonmedical personnel because of the risk they carry of permanent damage to limbs.

But the decades-old resistance to promoting tourniquet treatment by lay people has crumbled following high-profile incidents such as the Boston bombings and the shootings at Virginia Tech and in Aurora, Colo., where some victims bled to death.

Since the Boston bombings, all Boston police and emergency medical services personnel have been issued tourniquets and other cities are following suit: in the past year, departments in Houston, Dallas, New Orleans and elsewhere have implemented tourniquet training.

Tourniquet training is taught by the American Red Cross in its Wilderness and Remote First Aid training courses but not in its basic first aid course.

The Red Cross advises tourniquet use only if applying direct pressure does not stem blood loss or if direct pressure is not possible. It also recommends marking the tourniquet with the time of application so medical personnel will know how long it has been applied.

Hunt said the White House-led group is working to develop a public service campaign that will have the sticking power of successful initiatives such as "Stop, Drop and Roll" or "See Something, Say Something."

A mantra that people can repeat while reacting in an emergency can save lives, he said.
"We need to get it right. We have a real opportunity to prevent deaths," Hunt said.

As King prepares to deploy, he remains optimistic that efforts to promote commercially available tourniquets — as well as other pre-hospital medical care and approaches — will be "pushed out in the civilian world."

"All civilian pre-hospital providers should be carrying a tourniquet just as all U.S. soldiers are. If everyone had been carrying an $18 tourniquet in Boston, all of these limbs would have had adequate hemorrhage control," King said.