

Bleeding always stops

THIS COLUMN'S TITLE is one of the pithy aphorisms I learned from my medical school surgery professor, the acclaimed trauma surgeon Rea Brown. The point, of course, is simply that if one is unable to stem bleeding, the heart eventually has no more blood to pump and life ends. Uncontrolled bleeding is

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the number one cause of death in trauma, and frequently occurs before the victim reaches definitive care. Thus, bystander response may be the only hope for some trauma victims.

Because of this, there has been a movement by the trauma surgery community to teach first aid for severe bleeding ("hemorrhage") in the same way that CPR has become embedded in the community. This has culminated in a program, "Stop the Bleed," which aims to provide laypersons with the requisite skills to provide emergency control of hemorrhage.

The mechanisms of injury that produce severe bleeding today are most often penetration by projectiles (such as bullets) or severe impacts from events such as motor vehicle collisions. Fortunately, such events are quite rare in the backcountry, hunting accidents being a notable exception. Although control of hemorrhage should certainly be in the wilderness first aider's toolkit, just like CPR it is much more likely that the skill will be called upon on the highway than the trail.

As with any first aid scenario, the first step in hemorrhage control is to ensure your own safety. You won't be able to help anyone if you become

injured yourself. If protective gloves are available, use them, although this would rarely be the case in urgent situations.

After calling or sending for help, the next step is to recognize life-threatening bleeding. The "Stop the Bleed" protocols define this as bleeding that is spurting, does not stop on its own, pools on the ground, soaks through clothing, is associated with partial or complete loss of a limb, or occurs in a patient who seems confused or disoriented, indicating the potential onset of shock.

Once the source of bleeding is identified, the next step is direct pressure with any available clean cloth. Don't worry about "sterility"; hemorrhage is much more of an immediate threat than infection. If the wound is large and gaping, the cloth should be stuffed into it. Pressure should be maintained with both hands until a medical provider arrives—just as CPR is continued until a higher level of care is available.

"Bleeding first aid kits," if available, contain a special type of gauze ("hemostatic") which should be used for compression. These first aid kits also include tourniquets. Readers who took first aid courses decades ago probably recall tourniquets being mentioned as a last resort, and associated with all sorts of caveats. This teaching has been abandoned today; the risks from tourniquets are far less than those from uncontrolled hemorrhage. If a tourniquet is available and you are trained to use it, it should be

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applied immediately to any limb with life-threatening bleeding.

The "Stop the Bleed" program has a terrific website, www.bleedingcontrol.org. This site includes a host of valuable teaching resources, including a poster, booklet, and videos. It also includes an online store where materials, including bleeding first aid kits, can be purchased. The program also sponsors classes, and the website has information about registering for them.

"Stop the Bleed" is now the definitive resource for information on this topic. Some first aid courses have not as yet caught up with its recommendations. Like CPR, I believe that learning this skill is an essential requirement of citizenship, not just a wilderness first aid tool. ▲

Tom Welch, MD, is a physician at Upstate Medical University in Syracuse, and a member of the Wilderness Medical Society. He is a licensed professional guide and Wilderness Education Association instructor, and has guided groups in the Adirondacks, Montana, and Alaska. More information is available on his website and blog, www.adirondoc.com. Trauma surgeon and department chair Robert Cooney, MD, reviewed this column and provided helpful suggestions.