FORCE SCIENCE® NEWS

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In This Edition:

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The critical gap & the vital role of tactical medical care by LEOs

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I. Watch the video: The critical gap & the vital role of Tactical Medical Care by LEOs

A Force Science consultant spent nearly two hours recently talking about a critical four to six minutes.

That's the typical time law enforcement is on an injury scene before EMS personnel roll up to render medical care. And for a wounded officer or civilian whose life may be hanging in the balance, "that's a *huge* amount of time" to be without proper treatment, said Dr. Matthew Sztajnkrycer, an active SWAT doc, an associate professor of emergency medicine at the Mayo Clinic, and a long-time advisor and instructor for the Force Science Institute.

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The urgent need for officers to receive training in up-to-date Tactical Medical Care so that they can provide vital stop-gap aid to themselves or others while awaiting EMS was the theme Sztajnkrycer developed as the featured guest for the 6th annual Lewinski Lecture. The public speaking series was established by Minnesota State U.-Mankato to honor FSI's executive director, Dr. Bill Lewinski, a former law enforcement faculty member there.

In his wide-ranging observations, Sztajnkrycer explored the current status of law enforcement medical training, practical improvements that are needed, and real-world lessons learned from a unique study he has conducted of police attempts to save lives in crisis situations.

WHERE TO WATCH THE VIDEO

You can view video of his presentation, **"The Thin Blue Line Meets the Red Cross,"** in full on FSI's website.

CLICK HERE
http://www.forcescience.org/lewinski-lecture-tactical-medical-care.html?utm_source=newsletter&utm_campaign=356

or visit:

www.forcescience.org/lewinski-lecture-tactical-medical-care.html.

Here are some of the highlights:

EXPECTATIONS. Traditionally, Sztajnkrycer pointed out, the medical role of sworn officers has been to stabilize or neutralize a crisis injury scene so that it's safe enough for EMS to enter. But now, there's a growing "shift in community expectations," he said.

Given that officers tend to be the first of first responders, arriving ahead of EMS some 70% of the time that both are dispatched, the public is "starting to expect" officers to "do something" immediately to help injured or wounded parties until professional medical aid is on scene.

"Right now we're not quite sure" what that "something" should be, Sztajnkrycer said, but at least 100 times a day, according to available data, police in the US find themselves in that position—a "huge burden" on LEOs.

Police "don't respond much to falls at nursing homes" or to deliver babies, he explained. Instead, simply based upon the nature of their duties, a significant percentage of officers' medical-related encounters involve potentially life-threatening trauma, such as severe accident injuries or gunshot wounds to the head, torso, and/or extremities.

Also, law enforcement "is five times more likely to have to deal with multi-casualty events than non-law enforcement first responders," Sztajnkrycer said. How much training do officers typically have for facing the challenges of triage and treatment in such circumstances? he asked. "Probably not much."

"Officers have to make a lot of decisions very rapidly," Sztajnkrycer said. In addition to deciding what aid to render, they must decide whether the appropriate action is to even render aid, especially under circumstances of ongoing threat. Again he emphasized, "The public expects you to know. Not to know what to do doesn't bode well for your department or your city."

EQUIPMENT/TRAINING. More than 90% of officers in one survey wanted specific training in tactical medicine skills. However, a more recent study indicated that some 80% of reporting agencies currently "fall below the [National Highway Traffic Safety Assn.] minimum standards for [proficiency in] medical interventions."

Commonly, officers "just get CPR [training] and nothing else," he said. While that may qualify as adequate legally, "it doesn't mean it's an acceptable ethical standard," Sztajnkrycer said. There is also a question as to the utility of CPR in trauma, as opposed to cardiac arrest.

In expressing "outrage" at the under-training and under-equipping of officers medically, he cited survey findings that only about one-third of agencies across the US officially issued even tourniquets to street personnel. Most permitted officers to buy and carry this equipment on their own, although "15% of departments didn't even allow this," despite the tool's proven effectiveness in stanching life-threatening bleeding and reducing preventable deaths.

"This is a relatively new field, so there's not a lot of data" to identify the ideal law-enforcement-specific training approach, Sztajnkrycer said. As with any other tactical training, however, he believes that learning these skills much emphasize care under realistic conditions.

Thus the training should incorporate a preponderance of hands-on practice applying tourniquets, hemostatic dressings, chest seals, and other relevant treatment equipment and procedures, starting with self-aid and building to the handling of more complex officer-down situations.

"This can be integrated into use-of-force training—what to do *after* a shooting," Sztajnkrycer suggested. This initial training can then be reinforced with brief, periodic roll-call exercises that incorporate medical scenarios.

"In a relatively short period of time," realistic scenarios can "convey a lot of information" about what the agency protocol is for medical emergencies and how to perform it, he said. He also recommended that every patrol car be equipped with at least a basic first aid kit, including a tourniquet.

DUTY. Apart from the general obligation to protect the safety of the public at large, Sztajnkrycer believes LEOs have a "special duty" to "two unique entities" where on-scene medical care is concerned:

—to fellow officers who have responded to a situation resulting in their injury, and
—to individuals who have "come to harm through our enforcement interactions."

By legal precedent, as well as by a "code of conduct," the latter includes suspects, he stressed. "If you employ deadly force and it is 100% justified," you still have an obligation to render aid to the injured perpetrator "when it is safe to do so." He cited an example in which one of the nation's leading police agencies was sued by the estate of a suspect who, the suit claimed, was "left to bleed out" while officers stood by after a colossal bank robbery gunfight.

"Suspects come after everyone else on the priority-of-life pyramid, but they are still on the list," he said. However, "they don't automatically get help." It depends on whether the situation is safe enough for their medical needs to be tended to. "An officer does not have a duty to put himself at risk" in these circumstances, Sztajnkrycer said. But once the scene is sufficiently secure, care should be rendered to all injured to the best of the officers' abilities.

PRACTICAL TAKEAWAYS. As part of a study he's preparing for publication, Sztajnkrycer recently analyzed more than 100 body-cam videos from OIS scenes throughout the US, which provided a vivid portrait-in-the-raw of Tactical Medical Care as it's currently practiced.

He shared some of the takeaways from what he saw and the lessons to be learned:

• At a potentially threatening scene, "tactics take precedence over medicine," Sztajnkrycer said. "Good medicine can sometimes be bad tactics. Bad tactics can get everyone killed. You have to have good tactics before you can do good medicine."

• In about one-fourth of the events he studied, the officer involved was alone, "having to make all the decisions and take action" by himself, not only managing the immediate tactical aftermath but also deciding if, when, and how to render aid.

• In both this study and a recent analysis of Tactical Medicine in Wisconsin, overwhelmingly (over 90% of incidents), it was people other than officers who needed medical aid.

• From the time of injury to the time medical care was rendered by law enforcement averaged about 2.5 minutes. That was still about four minutes quicker than the arrival of EMS. "If someone is in shock from a gunshot wound center mass, you have about 10 minutes to get them into a hospital OR to have the best possible outcome," Sztajnkrycer said. Sometimes the available time is "best spent just shoving them in the back of a police car and driving really fast."

• "It's fantastic if you have a good trauma kit," he said, "but if you don't know where it is, what's in it, or how to use it, that's a problem." In reviewing videos, he repeatedly saw officers rummaging through kits, dropping contents on the ground, unintentionally disassembling tourniquets and being unable to rethread them properly, being stumped about how equipment works or what it's for, and misapplying treatment items. "QuikClot is not for use on chest trauma, for example."

• Some wounds may be hidden from immediate visibility. "Focus on where the blood is," he advised. That's likely to be where the highest threat is.

• Because fine-motor skills deteriorate under stress, officers often had difficulty opening sealed packages. In one video, an officer couldn't get a chest-seal package open, so he finally tossed it aside. "Open packets in advance." Sztajnkrycer said. "You're not dealing with a sterile situation, so it's not necessary for packages to stay sealed" until the moment of use.

• Simplify things to keep decision-making to a minimum. "The more options officers have to choose from, the more time it takes them to decide what the correct option is" and the more likely that errors will occur. Sztajnkrycer suggested color-coding

equipment so officers can tell at a glance what's appropriate for the situation they face, whether that's extremity wounds, central-body wounds, or often the most difficult to treat, "junctional" wounds at the sites where appendages branch off from the trunk.

• Practice procedures on yourself and others. It takes repeated "refresher" applications of tourniquets and other gear to build basic muscle memories and develop "cognitive scripting" so you can act automatically in a crisis.

• Remember to communicate throughout an episode. Get on the radio and call for help, then tackle the medical problems. As you work, verbalize what you're seeing, smelling ("There's a strong odor of alcohol..."), and doing, understanding that your body camera may fail to capture some important evidence. When EMS arrives, tell those responders what you're dealing with, where the injury is, and what you've learned so far about the patient's condition. But keep it simple.

And don't forget that communication *after* the event is important too. As part of his study, Sztajnkrycer reviewed department news releases that were issued about the incidents captured on camera. In about one-third of the cases where LEOs had rendered medical care before EMS arrived, "no one bothered to say so."

In this troubled day and age, Sztajnkrycer noted, "that's a missed opportunity" to build an agency's image in the public mind.

THE FUTURE. Currently, Sztajnkrycer is underway with research that he hopes will result in a national training standard for Tactical Medical Care.

After canvassing police administrators, trainers, and medical professionals, he wants to design an evidence-based modular learning package that will allow instructors to most effectively adapt what they need to teach to the time they have available.

"It is not realistic in our world to expect to save everyone" who's injured, he said. With some traumatic heart injuries, "fewer than one in five patients survive, even with a senior physician attending. Seven gunshot wounds to the chest is not likely to have a good outcome," and with a shot to the head, it's likely the subject "is not going to live regardless of what aid is rendered."

Still, there are those who can be pulled from the abyss in the critical gap before EMS rolls up, he believes. Better that an officer skilled in Tactical Medicine be at hand than one not up to the challenge for lack of training.

"We're not trying to make officers into paramedics," Sztajnkrycer explained. "But we do need to give them a basic understanding of what to do, when"—and how to do it.

Dr. Sztajnkrycer can be reached at: **Sztajnkrycer.Matthew@mayo.edu**

II. Reader's request about guidelines on the use of force in support of civil commitment orders: Can you help?

In our in-box:

We are looking to find any agencies (municipal, county, state) that have a policy/guideline on the use of force in support of civil commitment orders, where a behavioral health agency representative has law enforcement take a subject into protective custody to be seen for a psych evaluation.

We are seeing a couple of issues: 1) Officers force entry into homes without consent in order to detain the subject on the civil order. Then when force is used, it is claimed that the officers weren't legally in the home when force was used.

2) If a subject is a danger to him/herself, do any agencies have guidelines regarding the subject running during the attempted detention? Do agencies support foot pursuit and the potential serious injury to the subject and officer(s) in that eventuality?

Anything would be helpful to use as a reference as we develop policy around these difficult scenarios that seem to be increasing. If you can help, please contact me at: **James.Lockhart@kingcounty.gov**

Sgt. Tony Lockhart
CIT Coordinator/HNT Sgt.
King County (WA) SO

III. Are school shootings really as extensive as they seem?

An op ed essay in the *Wall Street Journal* recently raised a provocative question about school shootings: Are the stats being exaggerated?

Writer Daniel Lee, an Indiana journalist, called out a *New York Times* story, widely quoted in other media, that claimed that "gunfire ringing out in American schools used to be rare [but] now seems to happen all the time."

The *Times* claimed there had been nearly a dozen school shootings in just the early days of 2018.

"Yet a closer look at the statistics tells a different story," Lee writes. He then cites a series of recent events that are included in the "school shooting" database, such as:

• A gun was accidentally discharged in a weapons class at a Texas community college.

• Someone fired shots at random in the parking lot of another Texas college at 0200 hours.

• A shot from off campus struck a building at a California university at about 1800 hours; no injuries.

• A vet with PTSD shot himself in the parking lot of a closed Michigan school, with no students around.

Overall, *less than half* the "school shootings" counted in early 2018 actually occurred at elementary, middle, or high schools where students were present, Lee writes.

"Shootings at schools do happen with horrifying frequency," he states, and demand "long and serious study.... But...distorting reality [is] counterproductive. This obscures the real issues and antagonizes the well-meaning people [working] to solve the problem."

Our thanks to John Fairbairn, co-founder of SSI Technology in Northfield, IL, for alerting us to this information.

Written by Force Science Institute
February 6th, 2018