## Message from TEMS Section Chair

By Kevin Gerold, D.O., J.D.



I first wish to thank the NTOA Board of Directors for providing me the opportunity to serve as the Chairman of the TEMS Section and advocate for all medical providers who support law enforcement operations. A change in leadership brings about a time to review current initiatives and identify new opportunities while respecting the traditions of those who paved the way for us.

TEMS is rooted in the experiences of operator-medics on military Special Forces teams. TEMS, short for Tactical Emergency Medical Support, was coined by Drs. Richard Carmona and David Rasumoff in 1990. Dr.

Carmona became the first chairman of the NTOA TEMS Section and was succeeded by David Rathbun in 2003. These men were instrumental in working with professional organizations such as the American College of Emergency Physicians (ACEP), the National Association of EMS Physicians (NAEMSP), and the International Association of Chiefs of Police (IACP), and others to establish the NTOA as a leader in promoting TEMS practices within the law enforcement community.

The Committee on Tactical Combat Casualty Care (Co-TCCC), a working group of the Defense Health Board's Trauma and Injury Subcommittee, has been successful in reducing fatalities resulting from potentially survivable battlefield injuries through standardized pre-hospital training across the Armed Services. The training developed by the Co-TCCC recognized that battlefield trauma care differs from civilian trauma care in a number of unique situational and environmental factors. These include the potential for hostile fire, different wounding epidemiology, limited equipment, need for tactical maneuvers, and potentially longer evacuation times. While the law enforcement operating environment shares many similarities with the battlefield, they are not equivalent. With the support of the Co-TCCC, the Committee for Tactical Emergency Casualty Care (C-TECC) was created in May 2011 as a civilian counterpart to Co-TCCC. It is tasked with translating the work of the Co-TCCC and other evidence-based resources to develop evidence-based guidelines for casualty management during high threat civilian tactical and rescue operations.

Tactical medicine is now definable as the preventative care and medical treatment rendered during mission driven, high-risk, large-scale, and extended law enforcement operations. It adapts and incorporates sound medical practices for

## NTOA WELCOMES NEW TEMS SECTION CHAIR

We are pleased to welcome Dr. Kevin Gerold as chairman of our Tactical Emergency Medical Support (TEMS) section. Since beginning his medical career, Dr. Gerold has been actively engaged in teaching and providing emergency medical and trauma care. He is a Senior Medical Officer at the Johns Hopkins Center for Law Enforcement Medicine and is a Special Deputy United States Marshal. He was instrumental in establishing the Tactical Medical Unit within the Maryland State Police's Special Operations Command in 1996 and continues to serve as the program medical director/tactical physician.

Dr. Gerold has worked actively in the NTOA's TEMS section for several years. He has assisted with editing TEMS-related articles for *The Tactical Edge*, consulted on policy and curriculum development and has provided medical lectures at STORM courses at NTOA national meetings. He is also a member of the Board of Directors for the Coalition of Tactical Medicine.

Dr. Gerold has extensive clinical and operational experience in tactical medical operations and has published articles on topics related to critical care medicine, trauma care and emergency medicine. He has special expertise in providing operational medical support during high-risk, largescale and extended law enforcement operations. He has received awards and recognition for his achievements in medicine, his service to law enforcement and his work in providing prehospital emergency care. use in operations characterized by competing mission objectives, diagnostic uncertainty, limited resources, and performance decrement under stress for the delivery of medical care in an unfolding law enforcement mission. The benefit to law enforcement is sufficiently established to where TEMS is now a standard of care for law enforcement special operations.

During my time as a TEMS provider, I have come to appreciate the spectrum of needs within this aspect of pre-hospital medical care, and I have also seen that there is no single, one-size-fits-all approach to providing medical care during law enforcement operations. The scope of practice for a TEMS provider should depend on the needs and operating environment of the team and can include all levels of medical providers. TEMS is not a replacement for EMS services, rather it is an operational element that complements existing medical resources in order to promote the success and safety of the law enforcement mission.

Twenty years ago, few SWAT teams operated with any form of medical support; the standard practice then was to call 9-1-1 as needed or occasionally pre-stage an EMS unit.1 Today, it is widely accepted that a properly trained and equipped medical element within a law enforcement special operations team contributes to the success of the overall mission. The challenge facing TEMS now is to clarify the role and capabilities of medical elements in the overall law enforcement mission. We need to identify the best practices, training and equipment that will produce the best outcomes. In the presence of the realities of fiscal austerity and limited resources, we must continue to advocate for medical training, equipment and practices that are effective over those that are flashy or novel. To accomplish this, it is important for TEMS

providers to work together as a learning organization to develop and implement evidence-based practices tailored to the needs of a law enforcement mission.

A learning organization: 1) supports a culture that encourages continuous learning, critical thinking and risktaking with new ideas; 2) allows for mistakes and values contributions; 3) learns from experience; and 4) disseminates new knowledge throughout the organization for incorporation into its day-to-day activities. Evidence-based medicine seeks to incorporate scientific and clinical evidence into guidelines that direct the care of individual casualties in a way that will prevent an injury, disability or death. Evidence-based medicine is not "cookbook" medicine. Rather, it represents the integration of

individual clinical experience with the best available clinical evidence from systematic research.<sup>2</sup>

We must continually evaluate the need to adjust our current medical model to emerging threats. Just as some SWAT tactics are now taught to patrol officers, it has become necessary to provide patrol officers with basic TEMS skills. Recent mass trauma events such as those occurring in Tucson, Boston and Newtown, Conn., highlight the changing threats in our society to both police officers and citizens. These events support the call for providing primary first responders — our patrol officers - with basic TEMS medical training and equipment.3 They have the opportunity to prevent unnecessary deaths by neutralizing threats and then applying



tourniquets and pressure dressings to casualties in an effort to prevent the further loss of life due to exsanguinating hemorrhage. Medical response has become a core law enforcement skill and all police officers should have the basic medical skills and equipment to save the lives of victims, bystanders, themselves and other police officers in the event they are wounded. We must not forget the observation in 1898 by Dr. Senn: "The fate of the wounded rests in the hands of the ones who apply the first dressing."<sup>4</sup>

The NTOA is a professional law enforcement organization that provides high-level training, leads in the development of tactics and provides the exchange of information among its members to promote public safety and domestic security through training, education and tactical excellence. The TEMS Section supports these goals and will continue to collaborate with other organizations as an expert medical resource in support of the law enforcement mission.

The TEMS Section invites all medical providers supporting law enforcement and military operations to contribute to our efforts. Members are encouraged to submit ideas for topics that they would like to read about in the TEMS section of *The Tactical Edge*. I encourage NTOA members to engage the TEMS Section as a resource for training, consultation and collaboration on medical matters. I look forward to serving as the TEMS Chairman as we work and learn together to promote public safety and security. Please feel free to get in touch with me via email at kevin.gerold@ntoa.org.

## **ENDNOTES**

1. Carmona, R. "Tactical emergency medical support (TEMS) at 20 years." *The Tactical Edge*, Spring 2011.

 Sacket, David, William Rosenberg, J.A. Muir Gray, R. Brian Haynes, W. Scott Richardson. "Evidence based medicine: what it is and what it isn't." *BMJ* 1996; 312:71.

 L.M. Jacobs, N.E. McSwain, Jr., M.F. Rotondo, D. Wade, W. Fabbri, A.L. Eastman, et al. "Improving survival from active shooter events: The Hartford consensus." J Trauma Acute Care Surg. 2013 Jun; 74(6):1399-400.

4. Nicholas Senn (1844–1908). Dr. Senn was a pioneering surgeon who, from the beginning of his professional career, was interested in military medicine. In 1891 he founded the Association of Military Surgeons of the United States and served as its president for the first two years. His observations on first aid on the battlefield and on the conservative surgery of gunshot wounds are noteworthy. He served as president of the American Medical Association from 1897–98.

