This edition of NCEMSF News is dedicated to the heroic efforts of the members of the Virginia Tech Rescue Squad and to the lives lost on their campus on April 16th. Our thoughts and prayers are with the victims, families, and members of the Virginia Tech community as they grieve and heal from this tragic incident.

It is difficult to imagine responding to a call initially dispatched for a patient that fell off a bed loft and encountering two students shot in a dorm room. It is even more difficult to imagine being dispatched to the worst day of violence on a college campus in American history.

In one interview, a newscaster asked, “How do you prepare for something that no one has ever seen?” “How do you ensure that you are trained for such a situation?” While this concept may seem inconceivable to those who do not respond to such incidents, this is exactly what we do. We train for the situations that have previously occurred — and for those incidents that are yet to come. We construct preplans that provide a framework to respond to any incident. We know who we are going to call for additional help and resources. We even create plans for helping our members cope with the aftermath.

But in this case, it was not the scenario of a vehicle accident at the entry of your campus. It was not the scenario of food poisoning affecting several people. It was the killing of over 30 people plus the wounding of many others. Is your plan able to accommodate such an incident?

As the semester winds down and finals quickly approach, take a minute to review your plan for mass casualty incidents. In just a few weeks, the most experienced members on your campus will graduate and you will take their place. But before that happens, get their insight on how your organization would respond.

If you don’t have a preplan for mass casualty incidents, we are here to help you develop one. You can contact me at president@ncemsf.org or join the discussion on MCI Plans on our Facebook group. As a community of EMS providers, we are here to help you strengthen your organization.

Every incident that we respond to needs to be evaluated for how we can make it better. Most of our organizations address this through internal quality assurance programs. But we often forget to learn from the incidents that other squads respond to. I hope that we, as a community, do not forget this incident as it fades from the front page of the media in the coming months. Instead, we should critically evaluate it and learn from it.

Together we are one! And today, we are all Hokies.

George J. Koenig Jr. D.O.
NCEMSF President
Rethinking Ambulance Safety
Dr. Scott C. Savett, NCEMSF Vice-President

Much of my time at the 14th annual NCEMSF conference in Baltimore was spent taking care of administrative tasks and ensuring the conference ran smoothly. Despite my other duties that weekend, I made it a priority to see Dr. Nadine Levick's lecture entitled "Ambulance Safety: Everything that you need to know!" As an EMT with 15 years of street experience under my belt, it takes a lot to rattle me on a call. Having said that, Dr. Levick's message about ambulance safety was more disturbing than anything I've seen on an actual call.

Just in case you didn't get a chance to see Dr. Levick's lecture, I'll share with you some of the highlights.

1. Most box-type ambulances (type I and III) are inherently unsafe in crashes. These ambulances are typically built by the same companies that make campers and RVs. Due to a loophole in safety regulations, these vehicles are exempt from many federal safety standards.

2. Van-type ambulances (type II) can be safer than box-type ambulances since type II ambulances are sometimes built using integral bodies that have been engineered to better withstand crashes.

3. There are many hazards inside the patient compartment of an ambulance. Top among these is unsecured equipment. During an ambulance rollover, a flying cardiac monitor (as well as smaller pieces of equipment such as O₂ cylinders and handheld pulse oximeters) could cause severe injury or death to a patient or caregiver.

4. Not only is physical access to a patient and supplies better in a smaller ambulance (everything is within easy reach), but EMS personnel and patients are inherently safer when properly secured in such a vehicle.

5. There are no federally-mandated crash tests for ambulances. Few formal full-vehicle ambulance crash tests have ever been performed.

6. Federal ambulance specifications (KKK-A-1822E) are voluntary and only strictly apply to vehicles sold to the federal government through the GSA. While adherence to these specifications allows a “star of life” decal to be placed on the ambulance, there are only cursory considerations within the specs to patient and crew safety. A miniscule amount of text describes the safety devices that should be provided.

Now that I've summarized some of the more dire aspects of Dr. Levick's lecture (an Acrobat version of the PowerPoint can be found on Dr. Levick's Web site: http://www.objectivesafety.net ), I can happily say that safer ambulances may be coming sooner rather than later due to unforeseen reason.

Ford has provided the overwhelming majority of conversion chassis to ambulance manufacturers since the late 1980s.¹ These E-series (E-350 and E-450) cut-away chassis were powered by diesel engines manufactured by Navistar, a division of International. A disagreement dating back to 2002 over engine warranty issues caused Ford to sue Navistar and withhold payments for engines.² Navistar is now refusing the ship Ford any 6.0-liter diesel engines – exactly the model used in more than 90% of type III ambulance chassis.¹

The lack of Ford E-series chassis means that ambulance manufacturers will be forced to re-tool to accommodate a different chassis or switch to a gasoline engine. Many ambulance operators are not fond of gasoline engines since diesels tend to be more fuel efficient and last longer.³ While most ambulance purchasers who can justify it will likely go to a larger type-I chassis such as the Ford F-350/450/550 Super Duty, this would be a great opportunity to re-evaluate the use of large truck-based ambulances in the US.

Why are US ambulances so large? It's simple: we carry too much stuff and we like to be prepared for "everything." Ambulance services in Europe and Australia have been using smaller van-type (type II) ambulances for years. They also carry less redundant equipment than their American counterparts. Within the last five years the Sprinter van chassis (marketed as a Mercedes overseas, but wearing a Dodge badge in the US) has become a prominent player in the overseas ambulance market. Renault, which doesn't sell vehicles in the US, has a similar integral type-II van chassis that is also popular in Europe.

While a Sprinter-based ambulance is great for a two-person crew, there are certainly downsides to such a vehicle. What happens when you have an additional crew member on board? This is especially prevalent in campus-based squads where an experienced EMT mentors a new EMT on dozens of calls before the rookie EMT is able to take calls on his or her own. That means a three- (or four-) person crew and very cramped quarters in the back of the ambulance.

There is no easy answer to the dilemma of adequately secured large crews in small ambulances. I would challenge the membership of NCEMSF to think "outside the box" to come up with a viable solution. Many seasoned industry insiders have tried and failed with contraptions such as full-body tethered harnesses that allow EMTs and medics to move freely about the back of ambulances. While I have not had the opportunity to try it in person, I can only imagine that such a harness would be unwieldy and awkward.

We face enough threats to our personal safety on scene. Safer ambulances will make getting injured or killed inside our ambulance during a crash one less thing to worry about. I am confident that the collective ideas of thousands of intelligent, creative campus-based EMS personnel can overcome this problem. NCEMSF's discussion list, GENERAL-L, is the ideal forum to get our creative juices flowing. See the NCEMSF Web site for additional information on how to join the discussion on GENERAL-L.

The Way Medicine Ought To Be
Joshua A. Marks, NCEMSF Secretary

As the end of the current phase of my medical education nears and I prepare for the rigors of surgical internship, I have caught myself reflecting on the reasons I first chose to pursue a career in medicine. Many of the ideals I expressed in my medical school application personal statement have been significantly modified as I have been increasingly exposed to the modern practice of medicine. Patients are all too often known only by their disease processes and the overwhelming focus frequently is reduced to trying to manage the bottom line. Of course, there are always exceptions. During a recent elective in a small rural town in southern Vermont, I was refreshed to see that the traditional, patient centered care - like my grandfather used to practice - still exists. The level of care provided was as sophisticated and as evidenced based, but the environment and relationship between healthcare providers and patients seemed more genuine and conducive to effective healing. In the rural acute care clinic setting in which I worked, staff took as much time to learn about their patients’ lives as they did to manage their illnesses. The result: overall patient satisfaction!

For the brief time that patients were in the clinic, they had the staff's complete attention to whatever ailed them. Staff did not only treat the acute problem. They also identified how the injury might affect the patient more long term, physically, mentally, professionally, and socially, and, where appropriate, arranged necessary follow-up. The rural clinic was not immune from the reality of the business of medicine, however. They simply limited its impact on direct patient care. They delivered care regardless of ability to pay and negotiated acceptable payment options post treatment and practiced reasonable cost containment policies. In this small community, the patient always came first. It was also fairly routine for patients to return to offer thanks or send letters expressing their gratitude. The experience reminded me of the way I think most of us feel medicine ought to be when we first enter the profession. Furthermore, the small insular community in which we practiced and the impact we had on our patient population reminded me of the uniqueness of collegiate EMS and practicing medicine in the university setting.

As students helping students, we understand the impact of illness and injury on our patient population and are able to appropriately counsel. We know our patients’ concerns with respect to school, friends, parents, finances, and life in general. By definition we need to be compassionate as the patient and clinician roles could easily be reversed. It is also common to know our patients before they become patients, and we frequently encounter them again after having helped them in their time of need.

It is critical to keep these thoughts in mind as we continue to care for our own. We must remember that no matter how mundane a problem may seem to us as experienced pre-hospital healthcare providers, to the patient it is a personal emergency. It therefore becomes our role to treat it as such, extending the proper respect and dignity to the patient no matter the circumstances. Through treating, it is important to also educate, but we must never judge. We must routinely put ourselves in our patients' shoes and always be cognizant of how we ourselves would want to be treated, especially by those that we consider our peers. As I was reminded during my elective in Vermont and as I remember from the days when I used to regularly respond on campus, there is no greater reward in our profession than a sincere thank you from a grateful and satisfied patient!

Regional Roundup
News from Around the NCEMSF Regions

From the National Coordinator

The Regional Coordinator Network exists to facilitate communication between NCEMSF and its greater than 225 constituents. It is through the RCs that NCEMSF is best able to accomplish its mission of advocating and supporting campus based EMS. The RCs are equipped to assist each squad with the day to day issues it faces and to help publicize squad achievements. Since the 2007 Conference several new RCs have been appointed. Please join me in welcoming Jeffrey Bilyk (Canada), Matthew Schneider (Central), Joseph Grover (Midwest), and Jordan Ruiz (West) to our group of dedicated RCs - a complete RC listing is available online. If you are a CBEMS leader and have not met your RC, please email nc@ncemsf.org and I will gladly connect you.

Do you have news about your squad you'd like to share? Contact your regional coordinator and look for it in the next issue of NCEMSF News.
Most of us are familiar with the concept of "continuum of care," but are you familiar with the "continuum of collegiate EMS"? There are many ways to stay involved with collegiate EMS throughout the summer and beyond your college years. Limit the recurrent problem of brain drain in collegiate EMS. Organize a system at your institution to act as an ongoing mentor and resource to your current collegiate service after your campus departure. Just a willingness to field a couple of phone calls and e-mails from fresh students can make all the difference. Acting as a contact, your collegiate experiences will not be lost to memories, but rather transmitted and learned from for years to come. Another option is volunteering with NCEMSF as a regional coordinator. Check out our website for more information: http://www.ncemsf.org/about/leadership.ems

And while you are thinking about ways to stay active in collegiate EMS, consider renewing your NCEMSF membership. Memberships coordinate with the academic calendar and expire every May. Renewing your annual membership this June allows you to enjoy a full year of great membership benefits, including discounts on next year’s conference. Life memberships are a great way to simultaneously show your life-long commitment to collegiate EMS and avoid the bother of annual renewals. Go to http://www.ncemsf.org/membership/ for further details.

Many of our members are on the move after classes end. Take the time to revisit your NCEMSF profile at: http://www.ncemsf.org/membership/update_profile.ems and keep us informed of that changing mailing address. Have a great summer!

Did you know that you can purchase textbooks and other EMS reference materials at highly discounted prices through the NCEMSF Store? Visit the NCEMSF Store and help support the Foundation by clicking the “Store” link on the NCEMSF Web site. A variety of NCEMSF embroidered items are also available including polos, fleeces, fleeces, and hats. Visit the NCEMSF Store, powered by Emergency Training Associates, today!

http://www.emsbooks.com/