

# NCEMSF NEWS

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***"Leadership should not be for the 'elite'... Everyone needs to be encouraged to assume leadership roles and foster the growth and development of their leadership skills."***

## Message from the President

Dr. George J. Koenig, Jr., NCEMSF President

The start of a new academic year is always filled with change and excitement on college campuses. It represents new experiences for those starting their college experience and marks the transition of juniors to seniors. For collegiate EMS, it is a time for the new leadership to execute their plans for the year and to define the goals of their organizations.

I encourage organizations and leaders to think about how they will bring about change this academic year; to think about how their organizations will grow and become stronger; to think about how their organization will get to the next level; and to create a plan for yourself and your organization.

This past week while waiting for an admission to the ICU from the OR, I became engaged in a conversation with several of my colleagues. The conversation driven by one of our attendings was motivated by a recent change in departmental procedure. It quickly diverged into a philosophical conversation on how academic leaders are chosen and the flaws in that process. In academic institutions, leadership is typically selected based on tenure or the ability to obtain research funding instead of leadership, organizational, or fiscal management skills. However, as a leader, your responsibilities are not focused on being an excellent clinician or researcher. Your position demands leadership, organizational, fiscal management skills.

The process of selecting a departmental chair is similar to how we select our administrative and operational officers in college EMS. For the most part, we select officers based on tenure or on exceptional clinical skills. The irony of this is that if you wrote a job description for the leader of your organization you would focus more on leadership, organizational, and financial skills. Most people fall victim to the logic that people acquire leadership and organizational skills due to their involvement over years in an

organization. However, this is not the case. We often only realize after the person is elected that they lack the necessary leadership skills.

In college based EMS organizations, with a continuous turn over of personnel every four years, the acquisition of leadership skills by participation poses a significant challenge. Our primary focus is on our goal of training our members to provide excellent patient care. We construct elaborate systems to ensure the quality of our patient care through quality improvement initiatives. We involve physicians and healthcare providers for medical direction to guide our therapeutic interventions. We constantly strive to improve the services that we deliver. However, we loose focus when it comes to leadership development.

In order to be successful, leadership development must occur at all levels of membership. It is impossible to predict who will lead your organization or if they will possess the necessary skills. For that reason, the earlier you teach leadership skills, the more likely that transition from year to year will be seamless. Leadership should not be for the "elite." Everyone needs to be encouraged to assume leadership roles and foster the growth and development of their leadership skills.

There are many resources on your college campus to help you explore leadership development. Perhaps you could partner with a professor in your business school and create a leadership training program. Or maybe you could collaborate with your Dean of Student Life to develop a lecture series. It should not prove difficult to find the necessary resources on your campus. After all, the purpose of your college experience is to enable you to become a future leader in whatever field you choose. I encourage you to take advantage of the leadership lectures that we offer every year at our conference.

*(Continued on page 5)*

## Conference 2009 - February 27 - March 1 - Washington, DC

The NCEMSF Board of Directors is pleased to announce that the 16th Annual National Collegiate Emergency Medical Services Foundation Conference will be held February 27 to March 1, 2009 in Washington, DC at the Crystal Gateway Marriott.

The NCEMSF leadership is committed to providing the most educational EMS conference anywhere at the greatest value. Help us to make this year's 16th Annual Conference the largest gathering of collegiate EMS providers to date.

As in past years, conference registration fees will depend on personal membership status and time of registration.

More information, including a complete fee schedule, instructions on how to register and reserve hotel rooms, detailed travel information, speakers, and information about special programs such as awards, skills competition, and scholarship may be found on our Web site!

Register online starting December 1.

### NCEMSF Has a First Lady!



In a beautiful Labor Day Weekend Ceremony attended by the majority of the NCEMSF Board of Directors, NCEMSF President, Dr. George J. Koenig, Jr., was wed to Dr. Helen C. Azzam. Congratulations to the newlyweds from the entire NCEMSF community!

CONGRATULATIONS also to NCEMSF Conference Coordinator and Hotel Liaison, Jennifer Siegel (formerly Shoemake), on her summer marriage to Andy.

Best wishes for a SPEEDY RECOVERY to NCEMSF Membership Coordinator, Karolina Schabes, who was in a severe automobile accident earlier this month.

(Pictured L to R: LEFT - G Koenig, M Wiederhold, H Azzam [sporting her NCEMSF First Lady T-Shirt], S Savett & J Marks; RIGHT - M Hilton, M Wiederhold, G Koenig, H Azzam, S Savett, J Marks, M Milliron)

## New Group Initiative: Conference Scholarship Available

**Purpose:** The purpose of the New Group Initiative is multifold. First, it is to provide scholarship funds to groups in the formative stages. Second, it is to offer assistance to organizations facing significant financial hardship. Third, it is to provide incentive funds to help expand NCEMSF Conference attendance.

**Inclusion Criteria:** In order to be eligible for the New Group Initiative, your Collegiate EMS organization must meet one of the following criteria:

1. New Collegiate EMS Start-up
2. NCEMSF Institutional Member that has NOT been represented at an NCEMSF conference within the last 4 years
3. Established Collegiate EMS organization NEW to NCEMSF

**Funding:** Funds are limited and the NCEMSF Board desires to assist the greatest number of organizations possible. The idea is to enable two members from each recipient organization to attend. The funds

awarded are not intended to cover the full cost of conference attendance, but rather are supposed to ease the financial burden. It is still expected that schools will explore other funding sources.

**Selection Process:** The NCEMSF Board of Directors will review each application submitted electronically and will select the schools from which representatives may be sponsored. Those selected will be notified by January 1, 2009.

## NCEMSF Awards Capture the Spirit of Collegiate EMS

NCEMSF recognizes outstanding efforts made by individuals and organizations through its awards program. Instituted in 1997, the program includes the following awards:

- Striving for Excellence
- Campus EMS Provider of the Year
- Outstanding Collegiate EMS Organization of the Year

- Outstanding Collegiate EMS Advisor of the Year
- Outstanding Collegiate EMS Web site of the Year
- Outstanding Collegiate EMS Video of the Year

Nominations for all of the above awards may be made by submitting all appropriate materials by February 20,

2009. See the Awards page on the Web site for complete details and submission instructions.

The winners will be announced at the awards ceremony during Saturday's conference activities.

Email [awards@ncemsf.org](mailto:awards@ncemsf.org) with any questions about our awards and recognition program.

## Professor Squirrel

Serious Campus EMS Advice from a Nut

Dear Professor Squirrel,

Recently EMS units from my area were activated and deployed with strike teams to respond for Hurricanes Gustav, Hanna, and Ike. What does it mean to be National Incident Management System (NIMS) compliant? What do we have to do to qualify to be a part of the response team in the event of a declared disaster?

Ready To Go

Dear Ready,

The requirements for NIMS are being constantly reviewed and updated. Check the FEMA website for the most current information. There are some basic things you can do to ensure that your organization is NIMS compliant.

EMS personnel must be minimally trained in ICS-100 and IS-700, and first line supervisors must complete ICS-200. So you might incorporate into your training and promotion guidelines that new recruits must complete the two basic courses to be made attendants within your organization, and "crew chiefs" or whatever you call your senior shift supervisor should complete ICS-200 to be promoted to that position.

Your department's officers, if they are to be qualified to lead a strike team or task force, must also complete ICS-800B and ICS-300. Command and general staff in the command post must additionally complete ICS-400.

According to FEMA, the typed resource definitions for a ground ambulance requires a minimum of two responders (an EMT and a FR for a BLS unit or a paramedic and an EMT for an ALS

unit), a transport ambulance capable of taking on two litter patients, and have the equipment as specified in Emergency Support Function (ESF) #8. To quote personnel requirements, they must meet or exceed standards as addressed by EPA, OSHA and NFPA 471,472,473 and 29 CFR 1910, 120 ETA 3-11 to work in HazMat Level B and specific threat conditions. All must be immunized in accordance with CDC core adult immunizations and specific threat as appropriate.

To participate in your state's EMS strike team you should contact your regional EMS council or your state department of health. Your state may have additional requirements to place you on the call out for disasters. They can also discuss with you what legal protections and responsibilities you have when officially activated regarding liability, workers comp, and regarding your employment and student status rights. Remember, if you become a part of your state's EMS surge or strike team for disasters, you may be called up for two weeks at a time and it will take your personnel and your vehicle away from your campus. If you have the resources to spare, it would be a generous move on the part of your organization.

Just remember to make arrangements to keep the campus squirrels fed while you are gone!

Professor Squirrel

Professor Squirrel has been hanging out on campus begging for food from students and keeping an eye on campus EMS for many years. Send your questions to the Professor at [professor@ncemsf.org](mailto:professor@ncemsf.org). The Professor will answer the best ones in the NCEMSF newsletter. Your name and school will be kept confidential.



## Membership Minute

Karolina Schabses, NCEMSF Membership Coordinator

The freshmen have been oriented, the campus bookstore bombarded, and for those of you up north, it won't be long before the leaves begin to turn. The academic year has begun again. Before the nights get cooler and the problem sets and reading assignments begin to pile up, take a moment to renew your NCEMSF membership at [www.ncemsf.org/membership/](http://www.ncemsf.org/membership/). NCEMSF is dedicated to furthering collegiate EMS activities and our memberships operate on the academic year, not the calendar year, to accommodate school schedules. Memberships purchased between June 1, 2008 - May 31, 2009 will be credited to the 2008-2009 academic year.

To receive the full benefit of your annual membership, renew now. Institutional memberships are only \$25 annually. Annual personal memberships are \$10 for current students and \$20 for non-

students. Life memberships (\$75 student, \$100 alumni, \$150 non-student) are also available. Make sure to update both your personal and institutional online profiles with your current telephone number and email address, and, if you moved since the last academic year, your new mailing address as well.

Membership benefits include mailed copies of NCEMSF publications, great member discounts and offers, consulting services, reduced conference fees, eligibility for annual awards, and membership certificates and/or cards.

For those of you who have recently renewed your membership, thank you. We appreciate your continued support of collegiate EMS nationwide.



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## Regional Roundup

News from Around the NCEMSF Regions

### From the National Coordinator

The Regional Coordinator Network exists to facilitate communication between NCEMSF and its nearly 250 constituents. It is through the Regional Coordinators that NCEMSF is best able to accomplish its mission of advocating and supporting campus-based EMS (CBEMS). The Regional Coordinators are equipped to assist each squad with the day-to-day issues it faces and to help publicize squad achievements. There are few issues that the NCEMSF leadership has not seen before and for which it is not equipped to offer advice and guidance.

### Canada

*Carleton University Student Emergency Response Team (CUSERT)* is celebrating its 10th year of operations. Despite the sudden development that CUSERT would no longer be able to carry EpiPens due to policies at the national level of St. John Ambulance, CUSERT will continue to provide all of its other emergency services 24/7 including oxygen administration, airway management and cervical spine immobilization. CUSERT is working hard with various agencies and people to continue to administer epinephrine.

*Ryerson University Student Emergency Response Team (RyeSeRT)* has undertaken a new community initiative by

providing EMS care to a city wide event. Scotia Nuit Blanche is "a free all-night contemporary art thing". The event covers over 17 square kilometers of the heavily urbanized City of Toronto and attracts approximately 800,000 people having an economic impact of over \$4.9M on the city. RyeSERT will provide coverage during the event, as well as the set up of the projects. One project will make an inukshuk out of full size shipping containers. More information can be found at: [www.scotiabanknuitblanche.ca](http://www.scotiabanknuitblanche.ca)

### Central

*Rice University EMS (REMS)* is offering American Heart Association CPR, AED, and First Aid courses to members of the Rice community. This will complement the twenty AEDs installed throughout campus with funding from the Texas Arrhythmia Institute. Rice has plans to install more Public Access Defibrillator sites around campus in the near future.

*Texas A&M University EMS* and the collegiate EMS community mourn the untimely death of former Chief, Keller Verett. He will be deeply missed.

*Tulane University EMS (TEMS)* received the State of Louisiana EMS Outstanding Service Award this past June. In addition, Tulane EMS has recently become an official first responder group

in Tulane's Emergency Response Plan. The group now has 40 active members.

### Massachusetts

*Boston University Emergency Medical Services* reports that all is well - they have undergone a mock MCI drill, as well as the Yankauer Games Competition for which they received NCEMSF fame. The 3rd Annual Yankauer Skill Drill Competition will be held November 7, 2008 on BU's campus.

*Eagle EMS of Boston College* is rebuilding with strength after a change in administration, and is also looking to work on drills, planning an MCI drill and a mass CPR event for the fall. In addition, they hope to acquire an ambulance to supplement their response and provide better patient care.

The *Mount Holyoke College Medical Emergency Response Team* is approaching its 15th year anniversary. They conducted a small MCI drill at the end of 2007 with great success, and they aim to hold a larger drill in the upcoming year. They are also looking to expand service to cover athletic events, and start a third rider program with the local fire department. They have also acquired funds for a much needed stair chair, which will certainly be a welcome addition.

### Mid Atlantic

The *George Washington University's Emergency Medical Response Group (EMeRG)* has finally been cleared to operate an emergency ambulance after a nine year battle. The group, which operates in the Foggy Bottom section of downtown DC, received its final clearance to run the BLS ambulance after passing its inspection on August 23<sup>rd</sup>. They will be operating in a 1997 Ford ambulance with over 280,000 miles on it and were able to outfit the vehicle with \$15,000 worth of new equipment including a new Stryker stretcher and stair chair, and a top-of-the-line Garmin GPS system. EMeRG has existed as a free service on the campus since its establishment in 1996. The ability to provide an ambulance service will enable the providers to transport patients that previously would have had to pay approximately \$500 to \$800 for transport provided by DC Fire and EMS. The 62

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## Regional Coordinator Network

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National Coordinator	Michael Hilton	nc@ncemsf.org
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North Central	Andrew Snyder	northcentral-rc@ncemsf.org
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West	Dan Stepan	west-rc@ncemsf.org

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members of EMeRG celebrate this momentous occasion only two months after receiving a new office from the university. The group dedicated the ambulance in a ceremony held on September 11<sup>th</sup> during which they highlighted their work within the community, including their PAD program which has resulted in 165 AEDs being placed across the campus and free CPR/AED classes for university students, faculty, and staff.

#### **Midwest**

*Indiana University EMS (IUEMS)* is advancing in leaps and bounds this year. They are beginning to cover EMS at shows in the auditorium (75 a year), starting a 4-6 week probationary period of response to the residence halls, and eventually plan to offer in-services on wilderness survival and first aid.

This is also an exciting time for starting up new campus EMS organizations in the Midwest. Efforts are underway at *University of Toledo* as well as *Purdue University* to establish new squads.

#### **New York**

*Columbia University EMS* has made progress towards moving to electronic documentation of patient contacts. They are working with EMS Charts to implement an ePCR system that will allow a completely digital management of patient care reports including electronic storage and transmission of data to the state DOH. They hope to have the system live by the end of the fall.

*Five Quad Volunteer Ambulance Service*, serving the University at Albany, recently took delivery of a new PL Custom Type III ambulance in August. Additionally, last spring, they implemented a bicycle response team consisting of four specially equipped bikes. Over the summer, they saw a busy time caring for the fans coming to campus to watch the NY Giants training camp.

In April of 2008, *Fordham University EMS* celebrated its 30<sup>th</sup> anniversary serving their Bronx, NY community. In addition, at that time, they proudly took delivery of a brand-new 2008 AEV/GM TraumaHawk Type II ambulance. Over the summer their squad also completed the training of 25 new EMTs.

#### **North Central**

The *University of Chicago First Responder Corps* has successfully

established the University's premiere student-run and -staffed first responder training program. As of Spring 2008, 25 students were certified in Emergency Response by the FRC. Much of the past academic year was spent developing the organization, developing relationships with the University administration, and building the volunteer base. The group completed SOPs and will be applying for recognition as a non-transport First Responder unit.

#### **Northeast**

The *University of RI EMS (URI EMS)* has recently been awarded another federal grant to continue its work on upgrading communications. So far, approximately \$75,000 in federal and state grants has been received for this ongoing project. During the summer, URI EMS successfully executed a newly-revised critical incident management plan, responding to over 100 calls for service during a major event. The new plan is based on an implementation of federal NIMS standards. Also, URI EMS has started the process of purchasing a new ambulance as part of a larger strategic plan to support greater student enrollments that included shifting to a full-time year-round operating schedule, the recent opening of a new \$1.4 million headquarters facility and the equipping of a classroom with a state-of-the-art digital a/v setup and training equipment. URI EMS is now serving an average daytime population of 25,000 people in little over a square mile, responding to approximately 1,000 emergency/911 calls and working over 250 special events details per year. These figures have surpassed even some municipal departments in the area.

#### **Southeast**

On August 26<sup>th</sup> a tornado touched down on the Clemson University campus. It is not often that natural disaster strikes college property, but *Clemson University FD and EMS* chief William Daniel says they were ready. Several students were displaced after their apartment building was damaged, but no injuries were reported. Chief Daniel also cited an unusual drop in alcohol related emergencies during freshman orientation this fall. Several colleges across the country have adapted a shorter orientation this year in an effort to reduce down-time and free time for drinking.

*Emory University EMS* was recently featured on Fox 5 Atlanta and CBS 46 for its success during freshman orientation

this fall. Initially formed 15 years ago and run out of a dorm room, the EEMS squad now consists of around 40 dedicated volunteers who respond to 600 calls each year. Last spring, the squad certified roughly 600 people in CPR, and its goal was equally ambitious this fall: train the whole freshman class. Hundreds of freshmen showed up for CPR training, grabbing attention from the local media. While EEMS is Georgia's only student-run EMS organization, they hope to help *Georgia Tech* start its EMS service in the near future.

#### **West**

*UCLA* organized a successful active shooter training drill at the end of last year that included UCLA EMS, UCLA Police, LAFD, LAPD, FBI SWAT, LADHS and several area hospitals (see the YouTube video coverage of the drill by searching "Live shooter drill at UCLA"). UCLA has also ordered a new Type III rig, that should be arriving early October.

*UCSB* signed a MOU with its surrounding areas for automatic aid and expanded its service area.

\* \* \*

***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.***

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On a personal note, this past summer was filled with change both professional and personal. I finished my surgical residency and relocated to Baltimore to start a fellowship in Surgical Critical Care and Acute Care Surgery. The move from a community hospital where everyone knew your name to a large quaternary referral center was quite a change. It was reminiscent of starting college and making the transition from high school to college. When you finally figured out the system, all of the rules changed.

I am always available if you should need assistance. I hope to see you at our conference as we return to the nation's capital.

Regards,



George J. Koenig Jr., DO, MS  
President, NCEMSF

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## Disruptive Forces in EMS

Dr. Scott C. Savett, NCEMSF Vice-President

In every industry there is the possibility that something can radically change operational parameters. This is known as a “disruptive force.” Apple’s introduction of the iPhone is a recent example of a disruptive force in consumer electronics because it put a well-designed interface on an elegant device that supplanted two or three separate gadgets.

In some cases disruptive forces can have a positive influence, while in other instances it can lead to negative effects. In EMS circles, the development of computer aided dispatching (CAD) was a disruptive force several decades ago. In many ways CAD has increased the quality of dispatching and led to quicker response by police, fire, and EMS and forever changed the way dispatching centers operate.

As technology has improved, so too, have the capabilities of CAD systems. Take, for example, the CAD system in use in the suburban Philadelphia county where I volunteer as an EMT. Over the last fifteen years the county emergency operations center (EOC) has added features to the CAD system to make responder’s lives easier. First, it added station printers that spit out incident information as a call is being dispatched. Several years later it equipped crews with alphanumeric pagers that display dispatch information so there was never a question about the numeric address or spelling of the street name.

Relatively cheap mobile computers, coupled with GPS receivers and advanced two-way radios, are now standard issue on many ambulance and paramedic response vehicles throughout the US. Most recently our EOC introduced mobile data terminals (MDTs) in ambulances that should allow for more integrated data sharing. Responding crews will now have on-demand near-real-time access to the same information as the dispatchers.

With the latest innovation, crews are now expected to be more self-sufficient. Ambulance crews will be responsible for most of their own status updates, which will be input via MDTs and fed directly into the CAD system. When responding, arriving on-scene, departing for the hospital, or arriving at the receiving

facility, pressing computer keys will replace voice transmissions. Information to responders will be sent electronically to their unit’s MDT. Spoken radio traffic will be cut to a minimum, and theoretically, fewer dispatchers will be needed to staff the dispatch consoles.

Moreover, the implementation of MDTs aboard ambulances will fundamentally change how EMS is dispatched in the county. Included with the MDT hardware is an automatic vehicle locator (AVL), which constantly broadcasts an ambulance’s GPS coordinates to the EOC. While the county’s 40 independent ambulance squads have thus far been dedicated almost exclusively to their respective first-run districts, AVL could allow county dispatchers to send the closest, most appropriate ambulance. Once this happens, geographic boundaries begin to disappear and the 40 squads become transformed into one giant county squad. The plan is controversial among ambulance chiefs since some squads will inevitably lose calls to ambulances that are physically closer to the scene even though they may be in the next geographical jurisdiction. That tactic, known as “jumping a call,” was previously frowned upon but may eventually be officially sanctioned by the EOC and would be part of normal daily operations.

Under the new system, in the more populous parts of the county, ambulances should be more readily available. However, in more rural parts of the county, there may be a negative impact since ambulances could theoretically be diverted to cover a call while on their way back to their rural home territory after delivering a patient to the hospital. If this happens frequently, patients in rural areas will be required to wait longer for an ambulance since there simply won’t be one available within a reasonable distance.

Another drawback to the system would be EMS providers responding in areas they are not familiar with. While most EMTs and paramedics have an intimate knowledge of the streets in their own first-run territory, their first-run district will be essentially the entire county. GPS and MDTs can assist the crews in arriving at the scene and navigating from the scene to a hospital, but invariably people are

more comfortable driving streets they are familiar with instead of relying on a computer or GPS to provide turn-by-turn directions.

The final piece of the puzzle in this disruptive technology relates to money. While it’s more reasonably priced than ever before, the technology doesn’t come cheap. Three thousand dollars of computer and networking gear per ambulance plus a recurring monthly access fee is the price to step up to the table. But those fixed costs are the tip of the iceberg since the impact to a squad’s bottom line remains unknown. Areas of the county have vastly different socioeconomic profiles. A squad accustomed to treating well-insured township residents may end up treating more low-income uninsured patients from surrounding areas. Furthermore, annual fund drives to township residents become less meaningful since there is no guarantee that when they call 911 for an ambulance, their local squad will be the one responding. Supporting a local squad during its annual fund drive becomes a feel-good activity rather than something with a tangible benefit.

While the scientist and technophile in me yearns to see the outcome of this grand experiment, the on-the-street EMT in me fears the repercussions. Instead of one or two calls per shift, will my partner and I be sent all over the county to cover calls that the CAD system thinks we’re closest to? This could be a great opportunity for new EMTs wanting lots of experience on a wide range of call types. Seasoned EMS providers with lots of calls already under their belt may think otherwise. As a trustee of my squad, I will also be looking at the financial impact and doing my best to ensure this change doesn’t lead to the downfall of a fiscally stable organization that has withstood over 50 years of previous changes and technological advances.

As an NCEMSF board member, I wonder about the impact of such a system on member organizations. For those squads that operate transporting ambulances (ALS or BLS), you would likely see a dramatic increase in call volume. Historically, campus squads that have added non-campus territory to their first-due or mutual aid jurisdiction also begin

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## Mass Gathering Events: A Literature Review and Resource Guide

Michael T. Hilton, NCEMSF National Coordinator

The Summer Olympics and the Democratic and Republican National Conventions - these were interesting for a number of reasons. For collegiate EMS providers and leaders, they bring to mind the numerous mass gathering events on campuses, events which require special planning. There is a growing body of research analyzing mass gatherings, events with at least 1000 persons at a specific location for a defined period,<sup>1</sup> which provides the mass gathering events planner with the tools needed to provide effective management. There are also a number of excellent resources, based upon this research, available to collegiate EMS leaders to assist in planning their mass gatherings, from graduation to football games.

Arbon and others provide a retrospective descriptive study of 201 mass gathering events over a 12 year period, representing a total of 11,956 patients. They found a patient presentation rate of 0.992 per 1,000 attendees and a transportation rate of 0.027 per 1,000 attendees. Humidity had the greatest impact on patient presentation rates. Other factors that affected presentation rates included "mobility of the crowd, the availability of alcohol, the event being enclosed by a boundary, and the number of patient-care personnel on duty." The authors developed a predictive model to estimate patient presentation rates for future events and conclude that this model "can improve planning and the provision of health care services at mass gatherings."<sup>2</sup>

Zeitz and others provide an alternative retrospective model to forecast future incidents at mass gathering events using historical data from the event in past years. Their model was specifically compared to Arbon's model in a prospective study. The Zeitz model was based upon 7 years of historical data for an annually recurring event. They found a patient presentation rate of 1.6 per 1,000 attendees and a transport to hospital rate of 0.07 per 1,000 attendees. When comparing the two models, the Zeitz retrospective model "closely predicted the actual overall attendance." Ultimately, the Zeitz retrospective model proved to be more accurate than the Arbon method at predicting patient presentations. However, "the Arbon method is particularly useful for events

where there is no or limited information about previous medical work" or attendance. The authors conclude that "both methods have the potential to be used more frequently to adequately and efficiently plan for the resources required for specific events."<sup>3</sup> In a separate descriptive study based upon this data, Zeitz describes factors which influence patient presentation rates at mass gathering events. They found that patient presentations "correlated significantly with crowd size, maximum daily temperature, and humidity."<sup>4</sup>

Martin-Gill and others describe the implementation of a coordinated emergency medical services hospital-based healthcare team and investigate the integration of nurse-physician teams at a college football stadium event. During a four-year period, 1681 patients presented for medical care during 26 events. There was a total attendance of 1,544,244 which translates to 1.09 patients per thousand attendees. He found a transport rate of 4.19 per 1,000, representing 6.48% of all patients. The majority of patient contacts were for minor complaints (1451, 87.6%) and only a small percentage (12.4%) of patients required focused history and physical exam with pulse oximetry and electrocardiogram monitoring. The most common chief complaints included: altered mental status (52.7%) and chest pain (12.7%). In terms of the use of physicians on site, of the patients evaluated by physicians, 118 (57.6%) were able to be discharged, avoiding transport. Martin-Gill concludes: "the incorporation of physicians into a mass gathering setting may be associated with ...decreasing the percent of patients transported."<sup>5</sup>

The authors highlight concepts important to collegiate EMS mass gathering event planners. The need to predict patient presentation rate is paramount and Arbon and Zeitz provide two mathematical models to do this. Knowing this rate allows the planners to reliably determine staffing levels and equipment needs. Ultimately, basing the predicted patient presentation rate on data from past occurrences of a recurring event is the most accurate method. As a general guideline, an average value based upon the findings of these studies may be useful. By chi-square analysis, the patient presentation rates per 1000 discovered

by the authors do not significantly differ from each other ( $p=.982$ ), nor do the patient transport rates per 1000 differ significantly ( $p=.0813$ ). Thus, we can summarize their data: among a total of 234 events attended by a total of 17.9 million people, the average rate of patient presentation was 1.2 (+/- .652) per 1000 and the average rate of transport was 1.4 (+/- 4.782) per 1000 people.

Finally, there are a number of excellent resources that you can use to plan your event. Mass Participation Event Management for the Team Physician: A Consensus Statement,<sup>6</sup> developed by a collaboration of six major professional associations, is a free planning guide in bullet-list format found online through the American Academy of Family Physicians. Mass Gathering Medical Care: The Medical Director's Checklist<sup>7</sup> is provided by the National Association of EMS Physicians at a cost and consists of both a checklist and synopsis. A free, highly recommended, substantive guide, Provision of Emergency Medical Care for Crowds,<sup>8</sup> is provided by the American College of Emergency Physicians. It comes with additional tools and checklists and is written in an easy-to-read format. For a more complete summary of mass gathering literature, a good review is provided by Paul Arbon in the *Journal of Prehospital and Disaster Medicine*.<sup>9</sup>

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1. DeLorenzo RA. Mass gathering medicine: a review. *Prehosp Disaster Med.* 1997 Jan-Mar; 12(1): 68-72.

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## Professionalism in Collegiate EMS

Frank Caria, Founder Muhlenberg College EMS

As we approach the beginning of each school year, we think about basics such as checking supplies, recruiting members, developing fundraisers, and dusting off uniforms. While all of these benefit the overall operations of the squad, the professionalism and attitude of the members is what determines whether your organization will succeed.

The definition of Professionalism, is “the conduct, aims, or qualities that characterize or mark a profession or a professional person.” When one thinks about professionalism in EMS, it is too often associated with outward appearance of personnel and apparatus. While appearance may make an agency stand out, it does not in itself define professionalism. Professionalism is both a process and a goal, and it needs to be established, promoted, and maintained in order to be successful.

A squad uniform, even if only a T-Shirt, lends to a professional spirit. Uniforms alone, however, do not make a professional person. While looking the part will make it easier to play the part, as it gives members a sense of importance, identity and belief in what they are doing, it also makes members readily identifiable when they fail to live up to that professional goal.

Internal policies and procedures need to be established that set appropriate attainable expectations for professional behavior. These policies should be enforceable and codify consequences for unprofessional actions.

Promotion of professionalism is an ongoing process that needs to be done both internally and externally. Development of quality assurance committees and recognition programs for members, as well as funding for additional training, especially non-medical training in administrative and organizational growth topics, is essential. Externally, public outreach is key.

Once achieved, maintaining professionalism is equally difficult. While the chief responsibility lies with the leadership, each member is individually responsible as well. Each member, both old and new, must understand what is expected of him or her. Consider also developing a committee that meets monthly or quarterly to reassess continuously all aspects of the organization and how they relate to the professionalism mission.

Professionalism emanates from the leadership. With poor, unprofessional leadership, often comes poor, unprofessional behavior from the membership at large. Fortunately, it also only takes a few members to help reverse the negative, unprofessional atmosphere, promote positive change and “right the otherwise sinking ship.”

As collegiate EMS providers, there is often an uphill battle being faced with constant outsider scrutiny from other municipal agencies and university administration. Many campus agencies are student run and funded, and are frequently seen as only volunteer work

between classes. Many see campus EMS as nothing but a bunch of kids running around with medical supplies. This is the stigma that collegiate EMS must often overcome. Personal and organizational professionalism is the means to that end. Collegiate EMS providers must demonstrate their inherent maturity beyond their years in all avenues of campus conduct. At the end of the day, providers and organizations are judged by their constituents and universities based on their actions, both on and off duty. A fast, organized, and formal response to an emergency, serious or trivial, as well as rumors of the squads’ off duty party, are equally formative of public opinion and thus critical to the ultimate success of the organization.

Professionalism is in the eye of the beholder, but there are steps each organization must take in order to operate at the highest possible level. In terms of professionalism, there should be no difference between a collegiate EMS squad and any local municipal or other volunteer squad. All else being equal, the collegiate squad, composed of peers taking care of peers, should demonstrate an element of professionalism unattainable by anyone else who might serve the campus community. That ought to be expectation and the ultimate goal for all of campus based EMS.



*(Continued from page 6)*

to see a more varied population of patients. Instead of healthy (but perhaps accident-prone) 18-21 year-olds, your territory’s population might then include more potential geriatric and pediatric patients – two categories that are typically under-represented on college campuses.

If you are a crew member or officer of a non-transporting campus-based system such as a QRS, don’t think that you wouldn’t feel some impact if such a system is implemented in your area. Consider that if you currently work closely with one transporting ambulance squad that primarily covers your campus, the exclusivity will disappear. Any rapport you have built with the squad will mean

nothing when another squad is dispatched to take a call on your campus. And forget all of the pre-planning you’ve done with your local squad so the crews can easily find campus buildings. The incoming ambulance might have to be guided to the scene by campus safety officers since the crew won’t have the same nice campus maps in their ambulances that the local squad does. There are obviously other operational challenges, such as communication with a “foreign” squad, some of which could be overcome by technology such as a shared trunked radio system.

If you glean anything from this article, I would leave you with the thought that campus EMS personnel of all levels need

to be aware of their local EMS environment and changes in that realm. Be proactive in your approach to interacting with your EMS community, but be protective of your campus territory. Don’t fall into the trap of adopting additional territory just so your squad members can ride more calls. Instead, arrange for ride-alongs with busier squads if your members desire a higher call volume. Always remember that in most cases you are primarily a college student and secondarily an EMS professional – and not the other way around.



## Medical amnesty or punitive retribution?

## What is your school's approach and how does it affect you and your practice as a campus based EMS provider?

### About This Publication

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## Alcohol Policies Effect Likelihood to Seek Help

Amy Berenbaum, NCEMSF Central RC

After a night of partying, Amanda was found unconscious by her friends on a downtown street. They called 911 and asked for an ambulance. However, upon realizing that Amanda would most likely be suspended or subject to other disciplinary action from her university if she was taken to detox, her friends recalled 911 and said that they had misspoken regarding the street Amanda was on and changed the ambulance's destination to a few blocks away from where Amanda lay. Within the next few hours, Amanda's friends began to grasp the severity of her condition and took her to the ER.

Chris, excited for his first college Spring Fling, invited his older cousin Jared to visit him from another school. Jared decided that this was the perfect occasion to get Chris drunk for the first time. He pushed Chris to continue drinking, even when he told Jared he didn't think he could handle any more. When Chris' speech became incoherent and the normally reserved freshman became combative, Jared realized that Chris' initiation had gotten out of hand. After stalling and hesitating, Jared called the campus emergency number. I arrived with two other student EMTs. Jared repeatedly asked us whether Chris was going to get in trouble and told us that he felt horrible about not only putting Chris' health at risk, but also about potentially jeopardizing his academic career, as would have been the case at Jared's own school. We assured him that our school had a policy of medical amnesty toward people who seek help for alcohol and drug related emergencies.

These anecdotes are just two of countless examples of situations in which schools' alcohol and drug policies can endanger the health of their students. All too often college students refuse to seek help or dangerously delay seeking help for themselves or their friends in events involving illegal or age-restricted substances. Alcohol and drug policies vary widely among universities. While strict policies may have the ability to affect the choices students make about using alcohol and drugs, I contend that the majority of college students' decisions to use or abstain from using these substances is independent of their schools' policies. Consequently, those policies that do not offer medical amnesty to students who seek medical help only serve to deter students from taking the precautionary actions that they otherwise might take.

Although I have tried to find data to confirm my hypothesis, I have discovered that it is difficult, if not impossible, to locate any that classifies

its statistics by school instead of nationally or regionally. It is understandable that most universities would not want to make public their students' "indiscretions," but an analysis of the health outcomes from schools' alcohol and drug related emergencies, grouped according to the schools' policies, is necessary in order to determine the effectiveness and repercussions of different types of policies. A helpful albeit limited resource is the government Web site [www.collegedrinkingprevention.gov](http://www.collegedrinkingprevention.gov), which provides links to schools' alcohol policies. The Web site also contains links to a number of research studies done on college drinking, all of which report data for the entire United States and do not break it down by school or policy type.

Federal and state laws are put in place to regulate and protect their populations. Colleges' rules and policies serve the same purpose, except the populations they pertain to are young adults ages 18-22, a key age group for alcohol and drug-related issues. It is, therefore, imperative that the necessary research be done in order to assure that schools' policies are effective and in the best interest of the students health and well being.

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*Editor's Note: The preceding article raises one of many interesting research questions that studious collegiate EMS providers and NCEMSF are in prime position to help answer. CBEMS organizations, in conjunction with the research universities that they serve, need to begin leading the way nationally in areas of EMS research and disaster management, as well as healthcare research and reform as they pertain to the unique populations they serve. Collegiate EMS providers are an untapped, often overlooked, resource that should be dictating the future of EMS in this country. NCEMSF collects a plethora of data annually, and has mechanisms for collecting even more. This data is available to interested parties to utilize and analyze to begin solving these and other pertinent questions. This year, NCEMSF will be launching a funded summer research fellowship (details forthcoming) to begin looking at many of these areas of research.*

*Facebook and NCEMSF Conferences are great forums for raising the questions and beginning the discussions. Please post your school's policies on the issue online and let's start the debate.*



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**Mark your calendar for upcoming NCEMSF events:**

**October:** Renew your personal and institutional NCEMSF memberships. Plan Campus EMS Week events after downloading the 2008 packet at: <http://www.ncemsf.org/about/publications/emsweek/>

**November 10-16:** Campus EMS Week. Celebrate your collegiate EMS group with activities, demonstrations, and other fun events. Tell NCEMSF about your Campus EMS Week events by emailing [emsweek@ncemsf.org](mailto:emsweek@ncemsf.org). Also, post your pictures and share your experiences on the NCEMSF Facebook Group.

**December:** Early conference registration begins. Finals and vacation. Stay safe.

**January:** Register for NCEMSF conference. Make travel plans for the conference. Submit NCEMSF award applications and *Striving for Excellence* packets.



**February 27-March 1:** Attend the 16th Annual NCEMSF Conference at the Crystal Gateway Marriott just outside of Washington, DC.

**March/April:** Return to campus energized and begin implementing lessons learned at the 2009 conference. Transition to new squad officers.