

2009. Examples of student responses to cardiac and trauma clinical scenarios will be demonstrated as two of the most frequent presentation types to the emergency department calls to the ambulance service.

**Conclusions:** The combination of the use of interactive software and teamwork in simulations that paramedic nurses may experience in rural Victoria was highly successful in promoting confidence, competence, communication, critique, and team-building in this already high achieving group of students.

**Keywords:** assessment; competencies; education; emergency health; inter-professional; MicroSim; paramedic nurse; simulation; training

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### (M20) Training Course in Emergency Medical Assistance in a Tropical Environment

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**Introduction:** French Guiana is an overseas department of France in South America, where the practice of emergency medicine is limited due to geographical isolation and tropical diseases.

**Methods:** The aim of this project is to devise an original training course for medical teams in charge of casualties in an equatorial, isolated area and to prepare participants of the medical teams to engage in humanitarian missions without being a burden for the other rescuers.

**Results:** The course lasted 10 full days, and consisted of 50 hours of lectures and four days of practical training in the field. The topics covered were the tropical environment, specific pathologies, and techniques. Fifty-five professionals worked on developing the course. The simulated exercise involved real conditions and necessary skills training including: workshops with trekking, localization, means of radio communications, medevac, using a stretcher, helicopters, three nights in the forest (bivouac), and survival basic life support. The evaluation of the course included both theoretical and practical critique.

During the first three sessions (2007, 2008, 2009), 85 students participated: 48% were physicians; 29% were pre-graduate students; and 23% were nurses, who were working in hospital, clinics, or in the army, and were from French Guiana, French West Indies, or Europe.

**Conclusions:** This original university course is useful, even essential, for emergency specialists working in tropical environments.

**Keywords:** emergency medical assistance; French Guiana; isolated area; training; tropical environment; tropical medicine

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### (M21) Certified Hospital Emergency Coordinator Training Program

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**Introduction:** In an effort to create uniformity in job-critical knowledge and skill sets among hospital emergency coordinators throughout Georgia, yielding improved emergency preparedness and interagency cooperation, the Georgia Department of Human Resources Division of Public Health and the Medical College of Georgia's Center of Operational Medicine created the Certified Hospital Emergency Coordinator (CHEC) Program.

**Methods:** A focus group of emergency management, public health, and emergency medicine experts was convened. Twenty-seven critical and important tasks, skills, and areas of knowledge imperative to professionals were identified. Based on these, two novel courses were developed. The completion of these and other established courses available through the US government and the National Disaster Life Support Foundation, in addition to job experience, form the basis of the newly created three-level certification program.

**Results:** Approximately 125 hospital emergency managers from all regions of Georgia have been trained thus far, and another four courses are scheduled for 2009 with an average of 30 students per course expected. Attendance at both the Basic and Level II courses has created valuable interpersonal relationships, professional familiarity, and a common educational baseline amongst the state's hospital emergency coordinators.

**Conclusions:** Georgia's CHEC program represents a novel approach to training and preparedness at the hospital level. Coordination between public health and academia has allowed for the sharing of knowledge and resources in an unprecedented way. This has created enhanced preparedness throughout the state and has emboldened interpersonal and interagency cooperation within the realm of emergency management.

**Keywords:** emergency management; emergency medicine; emergency preparedness; public health; training

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### (M22) Significance of Education and Training for Confined-Space Medicine for Medical Teams and Search-and-Rescue Professionals—Lessons Learned from the JR Train Crash in Japan, 2005

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**Introduction:** In 2005, a seven-car commuter express train collided with an apartment building in Japan. The crash left 107 passengers dead and 549 injured. This paper highlights confined space medicine that was provided for three survivors and introduces the current approach for training Japan Disaster Medical Teams (JDMATs) and/or rescue professionals.

**Methods:** A retrospective analysis of confined space medicine provided after the train crash and a study of training of JDMATs and/or rescue teams.

**Results:** Three medical teams and search-and-rescue teams rescued three survivors whose bodies were trapped in the tangled wreckage of the first car. The medical teams secured intravenous lines and provided oxygen and approximately 4L of fluid before extrication. A 46-year-old woman was extricated in 14 hours, a 19-year-old man in 16.5 hours, and an 18-year-old man 22 hours after the crash. All three worsened at the final moment of extrication. Their crush syndrome required resuscitation at the scene, and intensive care such as hemodialysis and limb amputation in hospitals. Two patients survived and one patient died on the fifth day due to multiple organ dysfunctions.

Now, the curriculum of the JDMAT training course includes lectures and introductory exercises with rescue teams to learn the importance and difficulties of confined space medicine at the scene.

**Conclusions:** Confined space medicine was provided successfully after the train crash. Knowledge of confined-space medicine is essential to medical and rescue teams. Further education and training curriculum must be created.

**Keywords:** confined space medicine; disaster; education; Japan; search-and-rescue; train crash; training

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### (M23) Survey of Student Attitudes Toward and Knowledge of Emergency Preparedness

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**Introduction:** The possibility of natural disasters and public health emergencies, coupled with the possibility of terrorism, support the need to incorporate emergency preparedness into the curricula for every health professional school.

**Methods:** A survey methodology was employed to assess attitudes toward and knowledge of emergency preparedness among health profession students including schools of medicine, nursing, dentistry, and public health. The survey was targeted to graduating students, administered prior to the institution of an emergency preparedness curriculum, and then repeated as an annual survey.

**Results:** The survey found that 51.8% had been present at a disaster site as non-responders, while only 12.1% ever had been present as a responder. With regard to baseline classroom exposure, >50% reported no exposure to such key concepts as incident command, triage, all-hazards planning, surge, and aspects of terrorism. In addition, at the baseline, most students felt they had no competency in emergency preparedness. For example, only 10% of students felt competent with personal protective equipment. While exposure both as a responder and student was low, 82.5% of students felt that emergency preparedness should be a mandatory topic in their education. Lastly, with a minimal curriculum change students showed statistically significant increases on knowledge testing.

**Conclusions:** While exposure was low for emergency preparedness topics and most did not recognize how information they had been taught might be applicable to emergency preparedness, there was a strong desire for additional train-

ing. In addition, simple curricular adjustments can lead to significant improvements in knowledge.

**Keywords:** attitude; competencies; education; emergency preparedness; students; training

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### (M24) Breadth of Emergency Medicine Training in Pakistan

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**Introduction:** Traditionally, emergency care in Pakistan has not been a priority because of lacking primary care. Resources and trained personnel are scarce. Cultural barriers often supersede the urgency of medical conditions. Despite these challenges, the value of emergency care is gaining significance. The objective of this study is to explore the breadth of emergency medicine training in Pakistan, through an analysis of a teaching hospital with an emergency medicine residency. Aga Khan University Hospital in Karachi is a teaching institution with the only emergency medicine residency program in the region. It was started in 2000, led by US-trained physicians, and laid the foundation for emergency medicine in the country.

**Methods:** A review and analysis of the curriculum and clinical duties will be conducted to illustrate the specific roles and training of emergency medicine physicians. A chart review of patients seen in the emergency department during a two-week period will be conducted to determine if the current training is appropriate for the patient population and diseases seen.

**Results:** This study will provide a view of a curriculum in development and report on unique aspects of the program in relation to other established emergency medicine programs throughout the world. Furthermore, different roles emergency medicine physicians may play in this particular hospital setting will be identified.

**Conclusions:** Aga Khan University Hospital is a pioneer in establishing emergency medicine as an official discipline in the region. Through an examination of how a program is developing in Pakistan, an invaluable look of how emergency medical care is gaining significance in developing nations will be provided. This will help other nations that are interested in developing such programs to do so.

**Keywords:** curriculum; education; emergency medicine; hospital; Pakistan; training

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### (M25) Cultural Competency Education: A Challenge for the Humanitarian Workforce

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**Introduction:** "Cultural Competency" is an increasingly important skill required by the humanitarian workforce. Reviews and evaluations of recent major international events criticize the lack of cultural competency skills among foreign