possible natural disaster and public health emergencies supports the need to incorporate bioterrorism preparedness and response material into the curricula for every health professional school in the United States. It is clear that a main barrier to healthcare preparedness is a lack of coordination across the spectrum of public health and healthcare communities and disciplines. In order to assure a unified and coordinated approach to preparedness, benchmarks and standards must be consistent across healthcare disciplines and public health. The most basic level is education.

To date, the focus of bioterrorism preparedness and response training has been on the education of the existing healthcare workforce. With the realization that the entire healthcare workforce will need to become more educated regarding terrorism and emergency preparedness, and an understanding that this must be a constant effort, recent attention has focused on the healthcare student. Students' needs differ from those of practitioners, and it is incorrect to assume that continuing education is directly applicable to student education. There is a fundamental difference between educational competencies and occupational competencies between students and practitioners. It also is important to recognize that to assure proper preparedness, there must be a clear connection between departments of public health and all other healthcare entities. To this end, public health students were included in the creation of competencies and have shown that non-clinical practitioners can, and indeed, must be included in this process.

A process is described and a list of emergency preparedness core competencies for healthcare professions and their applicability to medical, dental, nursing, and public health students is presented. While this set of competencies was designed using these disciplines, they easily may be adapted to other healthcare disciplines. The only variations would be in the assignment of proficiency levels and the decision of whether the clinical competencies are appropriate. The core competencies that are presented have been divided into the following four categories, which represent broad subject areas and the separation of the competencies related to direct patient care: (1) emergency management principles; (2) terrorism and public health emergency preparedness; (3) public health surveillance and response; and (4) patient care for disasters, terrorism and public heath emergencies.

Keywords: education; emergency; health care; preparedness; professionals; students

Prehosp Disast Med 2005;20(2):s19-s20

## Do We Need an Emergency Medical Training Center of Excellence?

J. Stana Czech Republic

There is a manifest need for emergency medical training services in Eastern Europe and the former Soviet Union. The process of accession into the European Union has generated significant improvements in the healthcare systems of the countries commonly referred to as the "East European Eight" (Czech Republic, Estonia, Hungary,

Latvia, Lithuania, Poland, Slovak Republic, and Slovenia).

However, these countries must continue to work together to further improve their healthcare systems. For this purpose, every year, the project of the Rallye Rejviz attracts an increasing number of emergency medical service professionals to Zlate Hory—a small Czechoslovakian town near the Polish border. Building on existing experience, this study aims to bring international emergency teams together in the non-threatening environment of the Jeseniky Mountains in the Czech Republic to compare performances and exchange information about techniques and approaches, while building friendships and opportunities for cross-border cooperation. During the eight consecutive years of the Rallye Rejviz project, the concept of an International Center of Excellence, which would serve members from around the world, was developed. Several indicators suggest the Center would be beneficial and widely supported, including: (1) the successful eight-year tradition of the Rallye Rejviz (RR) with annual events, such as RR, Rescue Jesenik Conference, and the Helpers Trophy for children; (http://www.rallye-rejviz.cz/) (2) skilled experts on the Advisory Board of the RR, with existing background in the RR Sports Club and cooperating subjects; (3) an existing location (The Bohema Resort http://www.bohema-zlatehory.cz/); (4) very good strategic and geographic position of the place; (5) the support of the Olomouc region; and (6) the support of important scientific and business subjects.

The target clientele of the proposed facility would include doctors, nurses, paramedics, health care administrators, and medical school students and faculty seeking training in state-of-the art emergency medical training practices and procedures. Participation in the program would not only augment the professional skills of those individuals, but also encourage the dissemination of emergency medical training-related knowledge to colleagues at their home institutions. The Center will also serve as a training ground for first-aid education of Fire Brigade, local military assets, and volunteer groups like the International Red Cross and other relief agencies. The quiet location in beautiful nature with a big potential of sports and free time activities is a guarantee of good results of rehabilitation and recondition of the attendants.

Keywords: Czech Republic; emergency medical services; International Center of Excellence; Rallye Rejviz, training Prebosp Disast Med 2005;20(2):s20

## Emergency Medical Services Education and Challenges in Iceland

H. Svavarsdottir Iceland

The objective is to give an overview of the education and continuing education for the emergency medical technicians (EMTs) in Iceland. Topics will include how education is structured and made accessible for those who live in rural and remote areas. The challenges facing the future of the emergency medical services (EMS) education also will be made explicit.

Education for EMTs is split into three courses: (1) basic; (2) intermediate; and (3) continuing education. In order to make the courses accessible for all EMTs in Iceland, a different educational approach is used, depending on where the EMTs are located. The school and the students, especially in the rural and remote areas, depend on the distance learning technique, i.e., videoconferencing and the school's website. Most of the longer courses (basic and intermediate) are taught in two or more places at the same time by using the videoconference for lectures, where the students can watch lectures "on air" followed by skill stations in each place. The results of a basic course taught simultaneously in six different locations using videoconferencing will be highlighted. However, for shorter courses, like continuing education, an organization is made so that the courses can be held in the hometowns of the EMTs. It is clear that different educational approaches can raise the level of EMS education in the country, especially for those working and living in the rural and remote areas, as it is more likely students will attend courses when they are "brought" to them.

Finally, the presentation will cover the future challenges facing the EMS education in Iceland. The aim is to raise the standards even higher and move it to a university level with the option of offering Paramedic education in Iceland in cooperation with other EMS colleges.

Keywords: approaches; education; emergency medical technician (EMT); Iceland; remote areas

Prehosp Disast Med 2005;20(2):s20-s21

## Training for Major Incidents: Developing a Training and Awareness Course for Members of Mobile Medical Teams

G. Laverack; P. Davis<sup>2</sup>

- North Bristol National Health Service (NHS) Trust, United Kingdom
- 2. Avon Fire and Rescue Service, United Kingdom

With each new major incident event, the requirement for in-hospital staff, both medical, nursing, and others, to leave the hospital to attend the scene becomes more likely for National Health Service (NHS) acute trusts. Arrangements for medical and nursing staff that may "go mobile" vary greatly from region to region and even within local health communities. They remain relatively unregulated and are supported by a variety of local and regional initiatives.

In an exploratory study, Moakes and Kilner (2001) studied the views of nurses in accident and emergency departments who could be asked to form or join a mobile medical team at the scene of a major incident. It appeared that few had little idea of their roles and responsibilities, and a number of nurses involved in the study admitted that they were prepared inadequately and felt that they had little to contribute to the effective care of victims at the scene of a major incident. This view was upheld by the nursing and medical staff working in the two busy emergency departments at North Bristol NHS Trust.

Fortunately, most nurses, in particular those working in emergency departments, are familiar with the need to be flexible and embrace role expansion. Specific strategies and educational programs have been developed, allowing nurses' roles to evolve, i.e., the development of the autonomous Emergency Nurse Practitioners.

This presentation will outline how a health community in the southwest of England developed a one-day training awareness course for medical, nursing, and technical staff who are required to be available to mobilize in response to a major incident within the locality. The original concept was created by a multidisciplinary collaborative, involving an ambulance service, fire and rescue service, and two acute NHS hospital trusts.

More than 100 personnel have been trained through the course over the past three years. The need for the course will be reviewed, along with course content, and intended lessons learned. Appropriate required personal protective equipment will be addressed, and roles and responsibilities of each individual while working with disciplined emergency services personnel in the hostile environment of a major incident will be reviewed. The need for regular update, revalidation, and refresher training will be discussed.

Keywords: assessment; England; mobile medical team; mobilization; national health service (NHS); nursing; training

Prehosp Disast Med 2005;20(2):s21

## Free Papers Theme 6: Psychosocial Aspects of Disaster

An Emotional Preparedness and Resilience Curriculum for High-Risk, Fourth-Grade Children: An Essential Aspect of Comprehensive Disaster Preparedness

- D. Markenson; P. Madrid; R. Grant; I. Redlener
- 1. National Center for Disaster Preparedness, USA
- 2. Children's Health Fund, USA

Enhancing children's emotional preparedness and resilience is an integral part of disaster preparedness and post-disaster intervention. A study of New York City school children showed that only 34% of those with probable post-traumatic stress disorder and impaired functioning in the months after the 11 September 2001 attacks, received counseling, either within or outside of the schools.

Racial-ethnic and low-income children and families especially were likely to be affected. Data suggest that there may be extensive unmet needs among the children who were most affected by the New York attacks.<sup>2</sup> Studies also show that among inner city children, prior exposure to violence increases the risk of post-traumatic stress reactions that may be associated with impaired cognitive functioning. Vulnerable populations, who may be more susceptible to the emotional and behavioral consequences of a disaster, include children,3 those with pre-existing psychological problems, 4,5 and those with prior exposure to violence or who live in poor, violent, and underserved areas.6 Psychological disaster preparedness may mediate the adverse psychological impact of traumatic events and may be promoted by: (1) opportunities to master experiences; (2) validation; (3) support; (4) problem-solving skills; and (5) modeling, based on cognitive behavioral therapy.