

Tokyo, Japan; bombings at the World Trade Center in New York City, the federal building in Oklahoma City, and the American Embassy in Kenya; and the recent interdiction of terrorists attempting to enter the United States, provide enough evidence to suggest that strong local terrorism preparedness and response programs are needed.

Planning for terrorism must go beyond training courses and drills. Terrorism readiness requires an in-depth, multi-level, comprehensive approach geared to the nuances and intricacies of terrorism involving chemical warfare agents and industrial materials, and biological pathogens and toxins.

Objective: To provide attendees a detailed overview of effective metropolitan terrorism preparedness in order to effect similar programs in their home communities.

Briefing topics include: (1) planning assumptions and developing a baseline from where to begin the process, (2) threat analysis, targets, and vulnerability; (3) capability assessment—emergency medical service, fire and hazardous materials, law enforcement, public health, health and medical; and (4) program initiatives including training, equipment, enhancements, and exercises. Responses to terrorism start at the local level. Federal response assets will not arrive for hours, perhaps even days after an incident. Local jurisdictions must develop a stand-alone capability to react to a terrorist incident while awaiting the arrival of the authorities.

Key words: assessments; capabilities; initiatives; planning; responses; terrorism; threat analysis

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NBC Programme of the Swedish National Board of Health and Welfare

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Introduction: The Swedish National Board of Health and Welfare is a national authority under the government tasked with the supervision of medical and social care with respect to quality, safety, the rights of the individual, mediation of expertise, and participation in development and training. Within the programme of national defence, actions to manage threats from N, B and C agents have high priority. In this concept N, B and C agents include both warfare agents and agents occurring in peacetime (e.g., accidents with nuclear material, pandemics, and chemical accidents). During the last decade, the Swedish National Board of Health and Welfare has developed a programme meeting the demands of threats from N, B and C agents.

Medical expert groups (MEG): The first medical group established was the medical expert group for N agents (N-MEG) in 1986 after the Chernobyl incident when medical information in many cases was quite confusing. This group of medical experts is at the disposal of the Swedish National Board of Health and Welfare and the Swedish Government. Corresponding medical expert groups for C

agents (C-MEG) were established in 1998 and for B agents (B-MEG) in 2000.

Guidelines: The Board has published guidelines in order to standardise planning and preparedness for emergency situations in the country. These guidelines are "Chemical Accidents and Disasters" and "Nuclear Accidents and Disasters Due to Release of Radioactive Materials". Guidelines on "Pandemics and Bioterrorism" are under preparation.

Centres of Research and Expertise: In order to guarantee knowledge, research, education, and training within the N, B, and C fields, special centres of research and expertise are being contracted and supported financially.

Highly contagious patients: In order to be able to take care of and transport highly contagious patients, financial support is given to Linköping University Hospital for equipment and for education and training of personnel in treating and transporting (especially equipped ambulance and aircraft) highly contagious patients.

Decontamination and personal protective equipment: In order to manage situations of chemical incidents, a programme for decontamination and personal protective clothing has been developed. This programme includes equipment for decontamination of exposed persons at accident site and at hospital as well as personal protective equipment (including respiration protection) for ambulance and medical personnel. Research on decontamination procedures is also included in this programme and focuses on when, how, and why decontamination of persons exposed to chemicals must be performed.

Key words: accidents; biologics; chemicals; decontamination; disasters; education; knowledge; nuclear materials; programmes; research; responses; threats; training
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Health Information Team in a Congolese Refugee Camp of Tanzania

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Background: The persisting conflicts in the Great Lakes regions of Africa continue to cause refugees to flee into the United Republic of Tanzania. As of February 2000, the UNHCR has provided protection and assistance to some 415,000 refugees from Burundi, 285,000; DRC, 118,000; Rwanda, 7,600; and Somalia, 4,200. The Health Information Team (HIT), whose members were selected from refugee communities, has played a pivotal role in the provision of health services for refugees in Tanzania since February 1997.

Objectives: This study aimed at illustrating the role of the Health Information Team, and the gap between expected and achieved work in a Congolese refugee camp of Tanzania.

Methods: We conducted face-to-face, structured interviews with 50 members of the HIT and with 500 refugees. Focus group interviews also are given to both HIT members and refugees.

Results: We are scheduled to complete the survey by the

end of March, 2001, and will present the results during the 12th WADEM.

Key words: camp; health information; health services; information; refugees; team

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Quebec's Integrated Trauma System

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This poster summarizes the interactions between the 14 components of the chain of services in this trauma system model. Each link has received from the Quebec Automobile Insurance Board, a conceptual or an operational input in order to reach the preset goals for each specific service. In this presentation, the authors will inform the readers on the outcomes resulting from the implementation of this integrated approach, and especially on the support systems that permit the evaluation and improvement of the end product—quality.

Key words: chain; evaluation; goals; integration; quality; services

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Measurement of Carbon Monoxide in Expired Breath: An Experimental Study

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Introduction: Carbon monoxide (CO) detectors currently are used as an alert method by emergency rescue teams. Some of these detectors also can measure expired breath CO concentrations. This method of measurement has been studied only for low concentration of CO in smokers.

Objective: To validate the measurements performed with CO detectors by comparing the results with the gold standard method (infrared spectrophotometry).

Methods: This was an experimental study using the FIM CO-detector. CO gas was obtained from Cosma. Infrared spectrophotometric measures were performed with IR Beryl 100 Cosma. A bag was filled with a gas mixture of air and CO concentration from 100 to 500 ppm. Manual pressure was performed to reproduce expired breath. The CO concentration was measured with the CO-detector, and two samples of gas were obtained: (1) at the beginning; and (2) the end of the simulated expired breath. These samples had to be diluted (with air) to allow spectrophotometric measures. The dilution method as tested with a reference CO gas (80 ppm). A total of 21 measurements were performed.

Results: Dilution method was validated with a SD of 2.7%.

Conclusion: Despite a difference with the reference in measurements for high CO concentrations, the linearity of

these results is satisfactory for clinical practice. A CO detector is a efficient and reliable method to measure CO in expired breath

Key words: air; exhaled; assessment; carbon monoxide; detectors

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Practical Experience Inquiry on Emergency Endotracheal Intubation in Emergency Departments in France

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Introduction: In France, Emergency Medicine is not a recognized speciality. Endotracheal intubation usually is learned during a specific training ("Capacité de Médecine d'Urgence") with an apprenticeship on a mannequin or on human beings during anaesthesia. However, this training also is necessary for the emergency care of critically ill or injured patients. The objective of this study was to evaluate endotracheal intubation knowledge and practice of physicians working in emergency departments in France.

Methods: A questionnaire was sent to emergency practitioners in France. The collected data included a physician's knowledge of intubation procedures, their use of medications for intubations, and the options available for difficult airway management.

Results: 816 questionnaires received from general practitioners (48%), emergency physicians (28%), or anaesthesiologists (12%) were analysed. Among them: 64% received the training "Capacité de Médecine d'Urgence"; 50% work in an out-of-the-hospital emergency medical system ("SMUR"), and 15% work in an intensive care unit. Seventeen percent work in a hospital emergency department for <2 years, and 20% for more than 10 years. In emergency rooms, 88% of questioned physicians already had intubated patients, but 40% had not practised this act during the last month; 25% of emergency practitioners have made less 5 intubations during the last year, and 29% performed >15 intubations during the same period in emergency rooms. Predictors of difficult airway management (anatomic hurdles, anatomic techniques, Cormack, Mallampati score) never are used by 31% of emergency practitioners, while 51% of questioned physicians have been confronted at least once with an impossible intubation. In cases of impossible intubation, ventilation with bag-valve-mask is the method most often employed while waiting for assistance (63%). In their practical experience, a small number of physicians have used fibroscope (16.4%), intubating laryngeal mask airway (14.3%), kit for cricothyroidotomy (13.7%), and catheters for percutaneous transtracheal ventilation (10.9%). Rapid sequence intubation is used in more than 50% of intubations by 23% of emergency physicians. Among anaesthetic drugs, midazolam is the most frequently used (95%), then fentanyl