

the participants had severe lack of knowledge regarding the basics in management of nuclear (69.3%), biological (72.4%), or chemical (98.7%) incidents. Training difficulties were experienced in the areas of radiation damages (by 93.3% of participants) and the differences in the effects of contamination (90.7%) between radiation exposure and of other agents, weaponization (99.1%), the ability to differentiate between biological warfare agents and common biological agents (86.7%), and the different chemical warfare agents (100%) and their effects (80.5%) in combination with treatment (84.0%) and contamination/decontamination (87.6%). The potential number of mass casualties following the use of NBC warfare agents could not be estimated by 182 participants (80.9%).

Near the end of each course, different tabletop exercises were practiced. The average results of these exercises revealed: (1) 3.3% of the participants of each course were unable to launch correct early warning for the warfare agent used; (2) 4.1 % could not apply the proper treatment for a given warfare agent; (3) 2.7% were unable to decontaminate accordingly; and (4) procedures and algorithms regarding management and safety were not followed by 53% and 2.1%, respectively.

Keywords: emergency medical services (EMS); mass-casualty incident; nuclear, biological, and chemical (NBC) warfare; training; weapons of mass destruction (WMD)

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(116) Mass-Casualty Triage in the Chemical, Biological, Radiological, or Nuclear Environment

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Field trauma triage systems currently used by emergency responders during mass-casualty incidents and during disasters do not account adequately for the possibility of patients contaminated with chemical, biological, radiological, or nuclear (CBRN) material. A system is needed that can help healthcare personnel assess whether there has been exposure to or involvement of CBRN agents (detection), protect themselves from secondary contamination, account for the clinical implications of the contamination in the triage algorithms, and still provide accurate, rapid, and reproducible triage of large numbers of patients using minimal resources.

The objective of this study was to propose CBRN-compatible trauma triage algorithms based on a review of the literature and the input of recognized content experts. It is presupposed that this system will be applied to a disaster with a single discrete scene (e.g., a building collapse due to a bombing with a large radiation dispersal device) or multiple discrete scenes (e.g., several, simultaneous, chemical weapons releases in a city), and not to an event with widely dispersed patients and no specific scene (e.g., multiple smallpox patients scattered around country).

The primary focus of the system shall be on the triage of physically injured patients, with less emphasis on those whose sole source of injury is a CBRN agent. It is recog-

nized that work is needed in the latter area. Emphasis will be placed primarily on the actual triage of victims and less on detection and provision of protection from contamination.

Keywords: algorithms; chemical, biological, radiological, or nuclear (CBRN) agents; emergency responders; mass-casualty incident; triage

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(117) Emergency Physician-Managed Triage at a Rock Concert Avoids Overload at the Local Emergency Department

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Introduction: The organization of an on-site medical care system at music festivals aims to provide emergency medical care and treatment (EMCT) according to the principles of Basic Life Support, Advanced Life Support, and timely evacuation. In the case of a mass-casualty incident (MCI), EMCT also must prevent disruption of the local EMS system.

Methods: The composition of patient cases presenting during four-day outdoor summer concert, Rock Werchter, during the 10-year period, 1995–2004 was identified. The mean daily attendance at this event was 80,000, primarily teens and young adults.

Results: The overall patient presentation rate (PPR) was 220/10,000 attendees (2%). Emergency physician involvement at first aid stations (60/10,000) occurred in 27% of presentations. Only 12% of patients triaged by an emergency physician (EP) required transport to a hospital. The hospital transfer was 7/10,000. Patients transported to a hospital consisted of 80% trauma, 13% internal pathology, and 7% intoxication. Medical imaging was used in 70% of the patients transported to hospitals. Although PPR and the hospital transfer rate might be high compared to relevant literature (12/10,000 compared to 4/10,000), the systematic triage by an on-scene emergency physician reduced the eventual patient load to the local ED to 3.2%.

Conclusion: The benefit of a prehospital medical team at the scene of the event is illustrated by the effectiveness of triage of the on-site population and adequate regulation of patients transport to a hospital. A prehospital medical team is especially beneficial in situations likely to involve a high patient load, as may occur at a rock concert with a large young audience that is likely to use drugs and alcohol.

Keywords: emergency physician; music festival; on-site medical care; patient presentation rate; triage

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(118) Azienda Sanitaria Locale 10 Medical Services at the Olympic Village Polyclinic of Sestrires during the Torino 2006 XX Olympic Winter Games and IX Paralympic Winter Games

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Introduction: The Azienda Sanitaria Locale (ASL) 10, in agreement with the TOROCs Medical Service, coordinated the basic and emergency medical assistance at the alpine venue of Sestrires. This represented the integration between