

other features of the events such as attendance, 'boundedness', mobility, weather, and distance from parking into the database to describe the important features of each event/site.

Results: Statistical analysis included descriptive and univariate and multivariate analysis including regression modeling and the findings were compared and contrasted with existing regression models for patient presentation rates and transport to hospital rates in Australia. The relative influence of key environmental variables is described.

Conclusions: The project provides a quasi-experimental approach to describe the relative influence of different event characteristics on patient presentation number and type where some characteristics are constant across events—such as weather and crowd demographic.

Keywords: Australia; influential factor; mass gathering; patient presentation rate; World Youth Day

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Ambulatory Medical Services in Hajj

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The need for the provision of emergency medical services to pilgrims during Hajj season prompted the Saudi Ministry of Health to institute an Ambulatory Field Medical Services Committee (AFMSC). The functions of this Committee are to forecast healthcare risks in accordance with interchanging national and international themes, to set detailed plans to overcome the anticipated risks and to institute surveillance systems for close monitoring of the risk factors. Since its constitution by resolution number 862/1/29 dated 04 May 1422, this Committee has contributed significantly to the prehospital medical care offered to pilgrims. This paper aims to present the scope of work of this committee in Hajj, regarding procedures, equipment, and manpower. Comparative statistical data showing the total number of cases treated at the site or transferred to higher medical center in addition to analysis of patients according to their sex, age group and nationality, their disease codes during Hajj years 1422–1427 will be discussed. Conclusions regarding the efficacy and practicability of this Committee will be presented.

Keywords: emergency medical services; Hajj; mass gathering; pilgrim; Saudi Arabia

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Emergency System for Spectators at the F1 Grand Prix in Japan, 2007 and 2008

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Introduction: A medical team provided the emergency system for the spectators at the F1 Grand Prix in Japan 2007 and 2008. A medical system for the F1 Grand Prix at the Fuji Speedway in Japan in 2007 was prepared and implemented.

Methods: A preparation-working group was established for the spectators at the F1 Grand Prix. Data were gathered of the number of people in the audience and the weather at Fuji speedway (F1). The working group analyzed the data and constructed the emergency system.

Results: Four first aid stations and one command center were established at the Fuji speedway. The system gathered the patient information and the command center directed them to first aid stations. Patients were transferred to a first aid station. If the doctor diagnosed that the patient is seriously ill or injured, the commander send the ambulance to the first aid station and patient is transferred to the hospital. The commander also could send the doctor-staffed ambulance to the site of the serious case. If there are mass casualties, the disaster dispatch team is sent to the site. During the 2007 event, 500 patients were accepted. The reason so many patients were seen was the cold, rainy weather and bad, muddy ground conditions. In 2008, there were improvements made, and the patient load decreased by about 100. It was helped by good weather.

Conclusions: The emergency system for spectators of the F1 Grand Prix in Japan 2007 and 2008 was planned and implemented. Many lessons were learned and the performance was improved. The working group for the F1 Grand Prix audience in Japan continues to improve, preparing for the next Grand Prix in Japan.

Keywords: emergency system; F1 Grand Prix; first aid; Japan; mass gathering; working group

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EURO 08: Lessons Learned from a Nearby State of a Host City

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Introduction: Switzerland and Austria had jointly organized the recent European soccer championship (EURO 08) in June 2008. Switzerland designated four host cities for matches with dedicated organizations. However, the nearby states weren't involved in this planning but were susceptible to collateral damage from this mass gathering.

Methods: This is a prospective study of the health services of a state (670,000 inhabitants) located near the EURO 08 host city (3 matches) with 80,000 persons expected to attend, hosting of two teams (France, Holland) and related events (giant screens, supporter parades).

Results: A staff with prehospital and hospital representatives was asked to forecast an appropriate health response for everyday care in the realm of the expected increased demand during the 19 match evenings. More than 140,000 spectators attended with five giant screens. A total of 209 patients received medical care on site, six of whom were conveyed to nearby hospitals. An additional 50 patients who were linked to this event were seen in state hospitals, of these, four were hospitalized >24 hours. No major or fatal incident was encountered and everyday care wasn't compromised. A total of 1,131 health professionals were engaged as supplementary personal during this three-week period in order to deal with a mass-casualty incident.

Conclusions: The EURO 08 facilitated gathering of many health actors that provided constructive and efficacious medical care. However, the emergency services established

weren't used extensively. The bad weather and a strict control of alcoholic beverages in the dedicated sites contributed to this low exposure to serious problems.

Keywords: emergency medical services; EURO 08; mass gathering; medical services; prehospital; spectators

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Medical Activities and Preparedness in Professional Baseball Stadiums in Japan: A Survey

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Introduction: Professional baseball games with 15 to 50 thousand spectators, played over eight hundred times annually, is one of the typical mass gathering settings in Japan. But there have not been any systematic medical surveys reported and no medical regulations existed. We surveyed the daily medical activities and the preparedness for multi-casualty incident in these settings.

Methods: Questionnaires were sent to the management offices of 13 franchise professional baseball stadiums in Japan in the summer/fall of 2008. The surveyed period was the 2007 professional baseball season from spring to fall.

Results: The medical activities for daily professional baseball games included: a physician and one or two nurses are hired for each game; each stadium had a mean value of personnel of 1.5 ± 1.4 (SD) on-site clinics; 4.3 ± 2.8 beds; 6.1 ± 3.5 automated external defibrillators; and 1.4 ± 2.0 stretcher loadable elevators; patient presentation rate and transport-to-hospital rate were 0.282 ± 0.12 and 0.022 ± 0.031 per 1,000 spectators, respectively.

The preparedness for multi-casualty incidents included: triage posts were planned in seven, and not in five, with no reply from one stadium; administrative guidance was made by city offices in two, by local health departments in two, and by no organization in seven, with no reply from two stadiums, no multi-casualty incidents were reported in the surveyed period.

Conclusions: Daily medical care was managed and provided without serious problems, depending on each stadium's experience. But the recognition of a baseball stadium as a medical hazard for a multi-casualty incident did not seem to be widely shared by stadium managements and local governments. Mass-gathering settings should be considered as a medical hazard.

Keywords: baseball; Japan; mass gatherings; medical care; stadium

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National Guidelines for Safety at Music Events in Sweden

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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 Sestriere. This represented the integration between the Torino 2006 Olympic Medical Service and the Public Health System of the Piedmont Region.

Methods: We conducted a retrospective review of medical care provided to athletes, officials, workforce, and members of the "Olympic family" at one of the three polyclinics inside the Olympic Villages. This polyclinic was located in Sestriere during the XX Olympic Winter Games and IX Paralympic Winter Games Torino 2006.

Results: Descriptive statistics were used to characterize data from the Olympic medical care database.

Conclusion: This review evaluated the level of preparedness and the level of services available during the XX Olympic Winter Games and IX Paralympic Winter Games in Torino, Italy in 2006.

Keywords: contingency planning; mass gatherings; musical events; preparedness; Sweden

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Establishing a System of Paramedical Training for those with Bachelors Degrees and Mid-Level Workers in South Africa in Preparation for the 2010 World Cup

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Introduction: South Africa critically needs advanced life support personnel to staff the emergency medical services in preparation for the World Cup soccer tournament in 2010. This need will occur simultaneously with an introduction of a two-tier approach by the government.

Methods: This is a retrospective study on the introduction of a two-tier, advanced life support training program, standardized for both the civilian and military health services. The present short-course training approach for paramedics was reviewed and correlated it with the two-tier approach. A four-year bachelor degree for emergency care practitioner and a two-year mid-level worker certificate for an emergency care technician were introduced.

This paper mainly focuses on the design and unique introduction of the emergency care technician program. The program is designed on the body-system approach, and presented according to the constructivism training approach, utilizing standardized, international literature.

Unique elective components to address the needs of the military health service and the civilian emergency services are included.

Planning for 2010 requires a unique training system using short-term contract service with the Military Health Service. This was designed so that recruits are trained as emergency care technicians in the military, and then employed by the civilian government departments.

Results: An effective, flexible, and cost-effective program that can be utilized in various developing countries to establish and upgrade the standards of emergency care was established through military-civilian cooperation.

Conclusions: The mid-level-worker approach provides skilled practitioners to address 80% of the emergency care needs of the population through a constructivism-based training program.

Keywords: 2010 World Cup; education; emergency medical care; military-civilian cooperation; paramedic; soccer; training; World Cup

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