road collisions to terrorism-related shootings and bombings. The aim of this study was to characterize childhood injuries resulting from different types of MCEs in Israel.

Methods: A retrospective study of MCE-related injuries among hospitalized children (0-17 years) between the years 1998–2007 and recorded in the Israel Trauma Registry (ITR) was conducted. For this study, a MCE included any event in which ≥10 persons were injured. Study parameters included demographic characteristics, injury type and mechanism, hospital utilization, and injury outcome. Findings were compared with non-MCE pediatric hospitalizations during the same period.

Results: During the study period, 158 MCEs were recorded in Israel, of which, 75 (47%) involved children (mean age 11.3 years, 52% girls). The majority of MCEs were terrorism-related (63.4%); followed by motor vehicle collisions (buses or trains) (32%); a collapsed building (2.6%); and other mechanisms (2%). Teenagers (ages 10–17 years) were injured twice that of younger children (ages 0–9 years), (67% and 33%, respectively, p = 0.05). Head and neck were the most common body regions to be injured (67%). Most children sustained mild injuries (55%; Injury Severity Scale Score (ISS) 1–8), however, a significant percentage had severe to fatal injuries (29%; ISS >16). In comparison to non-MCE injuries, MCE-related injuries were more severe: ISS >16 (8% vs. 29%, respectively, p <0.0001); in-hospital mortality (0.4% vs. 3.4%, respectively, p <0.0001); underwent surgical procedures (20% vs. 50%, respectively, p <0.05); and intensive care unit admission rate (6% vs 31%, p <0.0001), and longer hospital stay (median length of stay 3.5 vs. 8.9 days, respectively; p <0.0001).

Conclusions: Morbidity and mortality are significantly higher among children injured in MCEs than by other mechanisms. In an effort to improve future pediatric MCE-related injuries, medical staff should be better prepared and resources should be improved for dealing with pediatric pre-hospital and hospital care following a MCE.

Keywords: injury severity; mass-casualty incident; pediatrics; traffic collision; terrorism

Plan for Increasing Pediatric Critical Care Surge Capacity in New York City

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Introduction: A mass-casualty event may result in an overwhelming number of critically ill pediatric victims that exceed available pediatric critical care (PCC) capacity. Therefore, the New York City Department of Health and Mental Hygiene (DOHMH) has sponsored a Pediatric Disaster Coalition (PDC) comprised of representation from New York City (NYC) pediatric hospitals and city agencies involved in disaster preparedness and response. One of the PDC’s tasks was to develop guidelines for hospitals in NYC to increase their PCC bed surge capacity. The ultimate goal was to increase NYC’s total pediatric critical care capacity during disasters by 200 beds above baseline.

Methods: The PDC members met twice monthly for 10 months. They first defined a PCC “surge bed” as a unit that requires the following: physical space to accommodate a bed or a stretcher; staffing required for continued critical care; and equipment and supplies to manage critical care pediatric victims of CBRNE events. The PDC developed guidelines to address the aforementioned “surge bed” requirements and reached a consensus on their merits.

Results: The PDC established the following PCC surge guidelines: (1) using existing clinical space in pediatric intensive care units to accommodate more patients on stretchers than originally intended; (2) modifying tools for “rapid patient discharge” and for “PCC rapid expansion”, enabling more admissions to the PCC, as well as to other clinical and non-clinical areas within a hospital; (3) developing an efficient process for enlisting additional staff and assigning them specific roles; and (4) developing processes for obtaining the necessary equipment and supplies to self-sustain for 96 hours.

Conclusions: The PDC guidelines for a pediatric critical care surge plan now is ready for a pilot study to ascertain whether it enables hospitals with PCC services to increase their bed capacity by developing their own surge plans.

Keywords: critical care; New York City; pediatrics; preparedness; surge capacity

Trauma in a Child’s World—An Asian Perspective: A Case Series of Three Hospitalized Singaporean Children with Post-Traumatic Stress Symptomology

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Studies in America and Europe have consistently found that a significant proportion (10–15%) of children and their families develop post-traumatic stress disorder (PTSD) after accidental injuries. Despite important socio-cultural differences, there currently are no published studies in Singapore or other Asian countries examining the prevalence of distressing emotional symptoms among children hospitalized for accidental trauma injuries or the emotional impact on their parents.

This presentation describes the cases of three Singaporean children who were hospitalized in a Pediatric Tertiary Hospital for accidental trauma and were identified as having developed PTSD symptomology upon a follow-up.