## Coalitions in the Planning and Response for Disasters

The New York City Pediatric Disaster Coalition: A Regional Model for Pediatric Mass-Casualty Planning

Michael Frogel, MD;<sup>1,2</sup> Katherine Uraneck, MD;<sup>3</sup> Arthur Cooper, MD;<sup>4,5</sup> Mayer Sagy, MD;<sup>2</sup> Michael Tunik, MD;<sup>6</sup> Stephan Kohlhoff, MD;<sup>3,7</sup> David Prezant, MD;<sup>8</sup> Dana Meranus, MPH;<sup>3</sup> Marsha Treiber, MPS;<sup>6</sup> Mordechai Goldfeder MPA, EMT-P;<sup>9</sup>

Nicholas Lobel-Weiss, BA, EMT;9

Avram Flamm, B.EMS,<sup>2</sup> George Foltin, MD<sup>6</sup>

- 1. Albert Einstein College of Medicine, New York, New York USA
- North Shore–Long Island Health System, Schneider Children's Hospital, New York, New York USA
- New York City Department of Health and Mental Hygiene, New York, New York USA
- 4. Harlem Hospital Center, New York, New York USA
- Columbia University, College of Physicians and Surgeons, New York, New York USA
- Center for Pediatric Emergency Medicine, NYU School of Medicine, Bellevue Hospital, New York, New York USA
- Departments of Pediatrics, SUNY Downstate Medical Center, Brooklyn, New York USA
- Department of Medical Affairs, Fire Department of New York, New York, New York USA
- New York City Office of Emergency Management, New York, New York USA

Introduction: Children frequently are the victims of disasters due to natural hazards and acts of terrorism. However, there is a lack of specific, comprehensive, pediatric, emergency preparedness planning worldwide. A disaster or mass-casualty event (MCE) within the New York City (NYC) metropolitan region involving pediatric patients could overwhelm existing pediatric resources. The New York City Department of Health and Mental Hygiene (NYCDOHMH) recognized the need to plan for a MCE with a large number of pediatric victims and funded a project called the NYC Pediatric Disaster Coalition (PDC). The PDC's primary goal is to create a coalition that addresses gaps in the ability and infrastructure of the NYC Regional Health Care System to provide effective and timely large-scale pediatric care during a MCE.

Methods: The PDC was created and includes 11 of 43 NYC Pediatric and Children's Hospital programs, experts in pediatric emergency preparedness, emergency medicine and intensive care (PICU), the NYCDOHMH, the NYC Office of Emergency Management, and the Fire Department of New York emergency medical services. The participants formed two committees to develop prehospital Triage/Transport and PICU Surge Capacity plans. The committees met twice per month to develop plans using an iterative process.

Results: After an extensive literature review and multiple draft revisions, Prehospital Triage and PICU Surge plans were formulated. Once implemented, they will provide specific pediatric triage criteria, transport matching severity of illness to appropriate tiered resources, and additional hospital PICU surge capacity. A "train the trainers" course to educate

healthcare providers in the essentials of pediatric intensive care, including simulation techniques, was implemented.

Conclusions: The PDC project has been an effective multidisciplinary group approach to planning for a citywide, regional, large-scale pediatric MCE. This structure could be used as a replicable model for other large urban centers. Keywords: disasters; New York City; pediatric care; preparedness; regional model

Prehosp Disaster Med

## Evaluation of the Washington, DC Emergency Healthcare Coalition

Tamar Klaiman, PhD, MPH; Melissa Higdon; Michael A. Stoto, PhD Georgetown University, Washington, DC USA

Introduction: The DC Emergency Healthcare Coalition (DCEHC), funded from a grant by the US Department of Health and Human Services Assistant Secretary for Preparedness and Response, was designed to improve healthcare organization emergency preparedness in the District of Columbia, and to create a model for emergency preparedness coordination. Its goal was to provide a comprehensive, uniform, and consistent framework and infrastructure for emergency preparedness across the full continuum of care.

Methods: A two-pronged approach involving structured interviews, and an online survey was utilized to assess the impact of the DCEHC on health system preparedness. Additionally, two citywide live exercises, the Presidential Inauguration in January 2009, a June 2009 Metrorail accident, and the A/H1N1 influenza outbreak in April/May 2009 provided unique observation points for evaluating the DCEHC's impact on: (1) emergency planning and analysis; (2) technology and communication, and (3) training and exercise activities.

Results: The DCEHC's activities have increased cohesion in emergency planning and response as evidenced by the effective response to the events noted above. Technology updates, such as the implementation of a citywide Health Information System has improved the DCEHC's ability to communicate. The city's emergency preparedness capabilities were further strengthened by DCEHC training modules and citywide live exercises. However, several challenges remain including: (1) ensuring and sustaining full engagement of organizations; (2) addressing access, technical, and training issues with new technology; and (3) minimizing staff burden on uncompensated preparedness and response training activities.

Conclusions: The DCEHC improved coordination among hospitals and healthcare organizations leading to greater emergency response capability in the District. This model can be replicated in other areas to improve relationships between healthcare agencies established prior to an emergency. Recommendations for future activities include maintaining inter-agency relationships via routine communications, ongoing exercises and evaluations, and establishing mechanisms to share successes and lessons learned with other jurisdictions.

Keywords: DC Emergency Healthcare Coalition; emergency preparedness; health care; organization; Washington, DC Prehoup Disaster Med