(P1-102) Developing Methodologies to Assess Resource Needs and Ability to Provide Interventions and Care for Children in Disasters, Terrorism and Public Health Emergencies

D. Markenson, M. Reilly²

- 1. Center for Disaster Medicine, New York, United States of America
- School of Health Sciences and Practice, New York, United States of America

Introduction: In emergency preparedness there is the need to prospectively develop an approach to which interventions can be provided with available resources and the maximal amount of clinical effectiveness which can be attained by staff.

Methods: A panel of pediatric emergency preparedness experts employed our previously validated evidence based consensus process with a modified Delphi process for topic selection and approval. Interventions were chosen such that resources and staff efficiency would not exceed previously published data for non-disaster emergency care but allowing for standard emergency preparedness planning alterations in standards of care such as the assumption that usual numbers of staff would care for a disaster surge of four times the usual number of patients.

Results: Using standard emergency preparedness assumptions of limited resources and staff efficiency, the panel agreed upon both methodologies for resource allocation and feasible interventions. A number of standard interventions would not be feasible and included detailed recording of vital signs, administration of vasoactive agents, prolonged resuscitation and central venous access.

Conclusion: By employing this approach to resource utilization described combined with the unique aspects of pediatric care, we can improve our planning and responses. This can be accomplished by understanding the needs of the population being served, learning how to focus on both pediatric needs and the expectations of the community with regard to care of children, adopting what has been learned in prior events in the United States and abroad, and developing prospective recommendations regarding essential interventions which can be performed in a disaster.

Prehosp Disaster Med 2011;26(Suppl. 1):s132 doi:10.1017/S1049023X11004353

(P1-103) Utilization of a Pediatric Disaster Coalition as a Model for Regional Pediatric Disaster Planning

G. Foltin, ¹ A. Flamm, ² A. Cooper, ³ M. Sagy, ⁴ B.M. Greenwald, ⁵ E. Conway, ⁶ V. Shah, ⁷ K. Biagas, ⁷ J. Abularrage, ⁷ K. Uraneck, ⁸ D. Gonzalez, ⁹ M. Treiber, ¹ M. Goldfeder, ¹, M. Tunik, ¹ M. Frogel²

- Center for Pediatric Emergency Medicine, New York, United States of America
- Cohen Children's Medical Center of New York, New York, United States of America
- 3. Trauma and Pediatric Surgical Services, New York, United States of
- 4. Cohen Children's Medical Center, New York, United States of America
- 5. Division of Pediatric Critical Care Medicine, New York, United States of America
- 6. Department of Pediatrics, New York, United States of America
- 7. New York, United States of America
- 8. Department of Health and Mental Hygiene, New York, United States of America

- 9. Office of Medical Affairs, Fire Department, New York, United States of
- 10. Office of Emergency Management, New York, United States of America

Purpose: There remains a lack of comprehensive pediatric emergency preparedness planning worldwide. A disaster or mass-casualty incident (MCI) involving pediatric patients could overwhelm existing pediatric resources within the New York City (NYC) metropolitan region. The NYC Department of Health and Mental Hygiene (DOHMH) recognizing the importance to plan for a MCI with a large number of pediatric victims, implemented a project (the Pediatric Disaster Coalition; PDC), to address gaps in the healthcare system to provide effective and timely pediatric care during a MCI.

Methods: The PDC includes experts in emergency preparedness, critical care, surgery, and emergency medicine from the NYC pediatric/children's hospitals, DOHMH, Office of Emergency Management, and Fire Department (FDNY). Two committees addressed pediatric prehospital triage, transport, and pediatric critical care (PCC) surge capacities. They developed guidelines and recommendations for pediatric field triage and transport, matching patients' needs to resources, and increasing PCC Surge Capacities.

Results: Surge recommendations were formulated. The algorithm developed provides specific pediatric triage criteria that identify severity of illness using the traditional Red, Yellow, and Green categories plus an Orange designation for continual reassessments that has been adopted by FDNY that has trained > 3,000 FDNY EMS personnel in its use. Triaged patients can be transported to appropriate resources based on a tiered system that defines pediatric hospital capabilities. The Surge Committee has created PCC Surge Capacity Guideline that can be used by hospitals to create their individual PCC surge plans. 15 of 25 NYC hospitals with PCC capabilities are participating with PDC planning; 5 have completed surge plans, 3 are nea completion, and 7 are in development. The completed plans add 92 surge beds to 244 regularly available PICU beds. The goal is to increase the PCC surge bed capacity by 200 + beds.

Conclusions: The project is an effective, multidisciplinary group approach to planning for a regional, large-scale pediatric MCI. Regional lead agencies must emphasize pediatric emergency preparedness in their disaster plans.

Prehosp Disaster Med 2011;26(Suppl. 1):s132 doi:10.1017/S1049023X11004365

(P1-104) The Surgical Care of Children with Gunshot Wounds in a Children's Field Hospital

V.I. Petlakh, ¹ V.M. Rozinov, ² S.I. Jandiev, ² D.J. Ivanov, ² V.E. Shabanov ²

- 1. Urgent Surgery, Moscow, Russian Federation
- 2. Moscow, Russian Federation

Introduction: The treatment of victims with gunshot wounds has gained importance over the past 10–15 years due to continuous military conflicts and the increase in terrorist and criminal acts. Since 1992, a group of pediatric surgeons has been trained to treat gunshot wounds in both children and adults in field hospitals of the Russian Service of Disaster Medicine in Northern Caucasus.