

## Pediatric Long-Term Care Disaster and Pandemic Planning

Michael Frogel MD, John Jermyn, George Foltin MD, Arthur Cooper MD

New York City Pediatric Disaster Coalition, Brooklyn, USA

**Introduction:** Children are frequently victims of disasters. However, significant gaps remain in pediatric disaster preparedness planning. This includes a lack of planning for pediatric residents in long-term care facilities. The New York City (NYC) Pediatric Disaster Coalition (PDC) is funded by the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) to improve NYC's pediatric disaster preparedness and response. The NYC PDC partnered with experts in pediatric disaster management and the care of pediatric residents in long-term care facilities to create the Pediatric Long-Term Care Planning Committee (PLTCPC).

**Method:** The PLTCPC included physicians, nurses, administrators, and emergency planning experts. The PLTCPC's goal was to create guidelines and templates for use in disaster planning for pediatric residents at long-term care facilities. The committee met bi-weekly over three months and shared facility resources to create tools that meet the specific challenges presented by this population.

**Results:** Utilizing an iterative process that included a literature review, participant presentations, review and improvement of the working documents, the final guidelines and templates for surge and evacuation of pediatric residents in long-term care facilities were created. Due to the onset of the COVID-19 pandemic, the NYC PDC reconvened the PLTCPC to focus on surge planning for pandemics at pediatric long-term care facilities. Two pediatric infectious disease clinicians were added to the committee. Utilizing the same process delineated above, a detailed pandemic specific annex was created based on clinical pediatric experience gained throughout the pandemic.

**Conclusion:** To the authors' knowledge, these are the first pediatric-specific resources for long-term care disaster planning. They address the importance of matching resources to the unique needs of PLTC facilities, in regard to space, equipment, staffing, and training. Pediatric long-term care facilities present special needs during pandemics and this approach can be utilized as a model for other facilities.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s100

doi:10.1017/S1049023X23002765

## Innovations in Disaster Preparedness Training: An Emergency Preparedness Curriculum within a Pediatric Emergency Medicine Fellowship

Christine Aspiotes DO<sup>1</sup>, Elizabeth Hewett Brumberg MD<sup>2</sup>

1. UPMC Children's Hospital of Pittsburgh, Pittsburgh, USA

2. UPMC Children's Hospital of Pittsburgh, Pittsburgh, USA

**Introduction:** Improved understanding of pediatric emergency preparedness can ensure the safety of children during disaster events, a population that is often overlooked.<sup>1,2</sup> One method to minimize disparities is to increase the pediatric preparedness workforce by providing education to trainees about the foundations of this field.

**Method:** A pediatric emergency preparedness curriculum was created as part of an elective prehospital track within a pediatric emergency medicine fellowship program at a quaternary pediatric hospital.

**Results:** The curriculum focuses on three domains: education, research, and administration. The trainee is required to participate in local and regional educational opportunities. Locally, trainees create and facilitate at least one tabletop exercise about a preparedness topic of their choice. They also attend regional and state-wide preparedness drills to foster better understanding of integrated system processes. Additional educational opportunities involve the creation of asynchronous learning modules for their division and development of just-in-time resources for disaster events. For research, they have the opportunity to pursue an original project in the field and participate in other research activities with the track director. The administration domain prepares the trainee to be a leader in the field. Trainees are active participants within the emergency department's preparedness committee and during hospital-wide preparedness meetings. These meetings develop protocols and policies as well as educational initiatives. Fellows are also encouraged to join national collaborative preparedness efforts through the American Academy of Pediatrics and the EMSC innovation and Improvement Center (EIIC).

**Conclusion:** This curriculum provides an introduction to and continued education about disaster preparedness to pediatric emergency fellows early in their career. Completion of the sub-track fosters future leaders in the disaster medicine field. In the future, this curriculum can be adopted by other medical training programs to expand understanding of pediatric preparedness concepts.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s100

doi:10.1017/S1049023X23002777

## Region V for Kids: A Pediatric Center of Disaster Excellence—Four years of Experience Creating an Improved Network Within the Disaster Cycle for Children and Families in the USA

Deanna Dabl Grove MD

UH Rainbow Babies and Children's Hospital, Cleveland, USA

**Introduction:** Region V for kids (originally known as Eastern Great Lakes Consortium for Disaster Response ) is one of the US-ASPR (Administration for Strategic Preparedness and Response) funded Pediatric Center of Disaster Excellence (PCOE), serving nearly 12 million children and families in a six state region of the United States.

**Method:** The original goals set forth were: to develop a coordinated pediatric disaster care capability, strengthen pediatric disaster preparedness plans and coordination, enhance state and regional medical pediatric surge capacity, increase health-care professional educational competency and enhance situational awareness of pediatric disaster care across the spectrum.

**Results:** The COVID-19 pandemic occurred shortly after original funding and caused a pivot from preparation to response for the partners, enhancing the collaboration and coordination for the region. The many lessons from the

COVID response have been important to creating more partnerships with federal agencies around situational awareness and considering social and physical determinants of health that affect children and families. The partnerships with state agencies and other key stakeholders have been valuable to close the gaps in the pediatric/family disaster cycle. There has been a multitude of tools and products that have been created and disseminated from this PCOE, including educational tools, behavioral health training and tools, virtual exercises and quality improvement projects. The best practices and ongoing projects highlight how to improve coordinated care for children and families within a region and is an example for the United States and beyond. There are also challenges to coordinated preparedness due to jurisdictional barriers and these are as important to highlight and create mitigation strategies.

**Conclusion:** This US supported PCOE is an example of a regional disaster coordination to mitigate and prepare for response concentrating on the needs of children and families in the larger disaster cycle.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s100–s101

doi:10.1017/S1049023X23002789

### Pediatric Disaster Science: Pediatric Specific Considerations, A Global Imperative, A WADEM Opportunity

Debra Weiner MD, PhD<sup>1,2,3</sup>, Christopher Newton MD<sup>4</sup>, Lori Peek PhD<sup>5</sup>, Jeffery Upperman<sup>6,7</sup>, Cinnamon Dixon DO, MPH<sup>8</sup>

1. Boston Children's Hospital, Boston, USA
2. Beth Israel Deaconess Medical Center, Boston, USA
3. Harvard Medical School, Boston, USA
4. University California San Francisco, San Francisco, USA
5. University of Colorado, Boulder, USA
6. Monroe Carell Jr. Children's Hospital, Nashville, USA
7. Vanderbilt University Medical Center, Nashville, USA
8. National Institutes of Health, Bethesda, USA

**Introduction:** Pediatric disaster science is critical to provide data and discovery to guide evidence-based preparedness, response, mitigation and recovery to best serve children, families and society. With the increasing frequency, severity and global scope of disasters, there is now an unprecedented imperative and opportunity to build a sustained pediatric disaster science workforce and infrastructure. The expertise, perspective and collaboration of the international, multidisciplinary community, including WADEM members, is integral to supporting effective, efficient, ethical, high quality pediatric disaster science and its implementation.

**Method:** A landmark Pediatric Disaster Science Symposium was convened in-person/virtually by the US National Academies of Science Engineering and Medicine in August 2022. Forty-eight pediatric disaster focused invited speakers, collectively representing government, non-governmental organizations, academia and community attended, and online. Attendees were polled during the two-day meeting to assign priority ratings to the topics discussed.

**Results:** Symposium topics included the importance, history and scope of pediatric disaster science, and research across

the disaster management cycle. Research considerations specific to children included medical and psychosocial vulnerabilities and manifestations; ethics and protections; protocol development and deployment; research tools; and data collection/integration. Scientific methodology topics addressed pediatric considerations for basic science, surveillance, clinical trials, applied sciences, community-engaged research, dissemination and implementation. Infrastructure needs described leveraging disaster centers, research networks, disaster response teams, government agencies and professional societies integratively across disciplines. Building a sustainable workforce, including training and engaging pediatric scientists with disaster-focused/disaster-relevant research, funding streams, regulation and advocacy were also discussed. Research priority ratings yielded preliminary data to inform pediatric disaster science priorities.

**Conclusion:** The meeting provided insights that can further guide discussions among global disaster experts and scientists, including WADEM members, to prioritize, build and scale sustainable pediatric disaster science that yields evidence-based strategies, plans, resources, and actions that improve disaster preparedness, response, mitigation, and recovery for children, families and societies worldwide.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s101

doi:10.1017/S1049023X23002790

### Pediatric Casualties in Terrorist Attacks: A Semi-Quantitative Analysis of Global Events through the Lens of Counter-Terrorism Medicine

Lea Ohana Sarna Caban MD<sup>1</sup>, Derrick Tin MBBS<sup>1</sup>, Vesna Markovic Ph.D.<sup>2</sup>, Robert Ciotto BA Post Baccalaureate Pre-Medical Student<sup>3</sup>, Fadi Issa MD, JBEM<sup>1</sup>, Ashley Kane MD, MSCR<sup>1</sup>, Alexander Hart MD, FACEP<sup>1</sup>, Debra Weiner MD, PhD<sup>1</sup>, Gregory Ciotto MD<sup>1</sup>

1. BIDMC Disaster Medicine Fellowship Department of Emergency Medicine, Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, USA
2. Professor, Justice, Law and Public Safety Studies Lewis University, Romeoville, USA
3. Northeastern University, Boston, USA

**Introduction:** Terrorism remains a major threat and concern in many countries around the world. Children represent approximately 30% of the world population and in the event of a terrorist attack can either be primary targets, to include the possibility of abduction, or unintended victims. Children are unique in their vulnerabilities and therefore, require special consideration.

**Method:** This study is a semi-quantitative epidemiological analysis of all terrorism-related pediatric fatalities and injuries sustained between 1970–2019. Data collection was performed using a retrospective database search through the Global Terrorism Database (GTD). Summaries of events including search terms associated with children were individually reviewed and those describing the deaths, injuries, or abduction of children were tallied.

**Results:** Of the over 200,000 terror events, 2,302 events met inclusion criteria. This represented 1.14% of total events which