The State of Pediatric Disaster Education:
A Comprehensive Review & Analysis Report
Section 16: WHAT HAVE WE LEARNED?

This section is part of a comprehensive review and analysis of current issues and trends in pediatric disaster education. The report explores current gaps and opportunities in pediatric disaster education. A Pediatric Disaster Education Concept of Operations is recommended to assure whole community inclusion of children in all phases of the disaster.

Eastern Great Lakes Pediatric Consortium for Disaster Response: Education Workgroup

2021

WHAT HAVE WE LEARNED?

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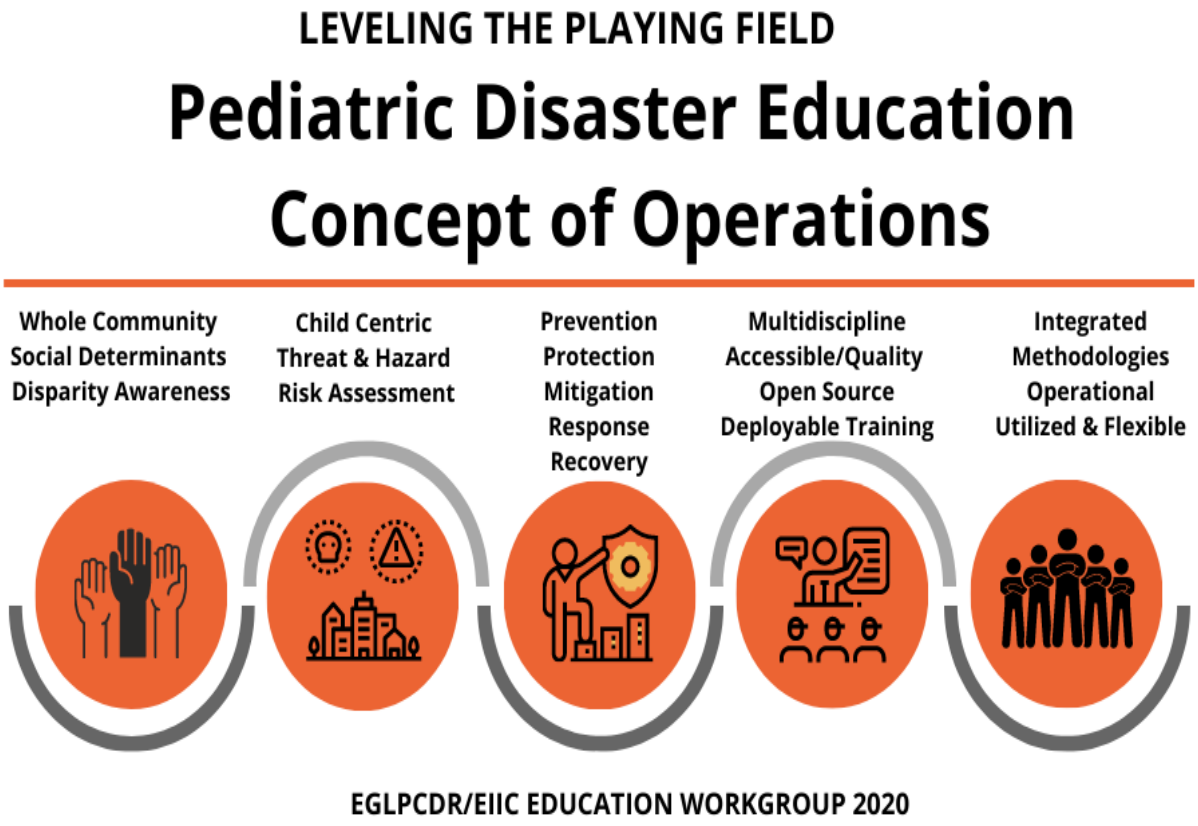
Disasters create unprecedented challenges for communities and their children. Today, disaster science has evolved into complex and sophisticated processes using an array of technology that demands data-driven metrics. The process of disaster readiness requires providers to rapidly learn new skills and methods in real time—especially when the disaster impacts children.

There is a critical need for a model to universally connect frontline workforce and communities with solutions that effectively address children's need throughout the disaster cycle of mitigation, planning, preparedness, response, and recovery. Such a model would promote the establishment of regional pediatric disaster response systems, thereby reducing operational barriers across jurisdictions during real world events. Education would become a key driver to achieve collaboration, solve problems, and establish child-ready communities. Adopting a pediatric disaster education Concept of Operations would facilitate the integration of children into multi-discipline disaster education and serve as a vehicle to promote whole community resilience (see below for graphic of proposed CONOPS components).



Recommendations to Reduce Pediatric Disaster Educational Gaps

The following recommendations are inspired by the Institute for Healthcare Improvement[1] framework for spread. These approaches have the opportunity to "normalize" pediatric disaster readiness as part of emergency management. The strategies support creating systematic solutions across health care systems, coalitions, public health, public safety and emergency management organizations.

Culture, Leadership, and Governance

- Ensure pediatric disaster readiness is a demonstrated core value.
- Assess capabilities and commit resources to advance pediatric disaster readiness
- Widely share information about disaster consequences to children to promote transparency.
- Implement foundational competency-based on-boarding focused on children in disaster across disciplines

Patient and Family Engagement

- Establish competencies for all health care professionals for the engagement of patients, families, and care partners.
- Engage patients, families, and care partners in disaster readiness.
- Ensure equitable engagement for all patients, families, and care partners.
- Promote a culture of trust and respect for patients, families, and care partners.

Learning System

- Facilitate both public/private organizational learning.
- Accelerate the development of pediatric emergency and disaster learning networks.
- Initiate and develop systems to facilitate interprofessional pediatric education and training
- Develop shared goals for pediatric disaster readiness across disciplines.
- Expedite regional multi-discipline coordination, collaboration, and cooperation.

Additional Opportunities & Recommendations

- **Improve child-centric situational awareness:** Most community, fire, EMS, and hospital leaders are not aware of what happens to children in disaster. Victimization, abduction, homelessness, behavioral health consequences and their long-term effects all increase children's risk of addiction, suicide, and workforce and economic decline. Awareness is the first step in creating engagement.

- **Practice inclusiveness:** Ensure that children's needs are addressed as part of the population and whole community guidance by using the word "children" in disaster plans. It is important to recognize children as a distinct part of the community in order to ensure that their needs are addressed. Disaster plans should not use the word "families" or "vulnerable populations" as a proxy for "children."

WHAT HAVE WE LEARNED?

- **Think *systems*:** Promote pediatric system of care thinking across communities through collaboration. Establish talking points to dispel flawed thinking among organizational leaders who erroneously believe there is no need to do more that prepare to care for children under normal conditions. Regardless of the setting, competency degrades when pediatric skills are not practiced and the skill subsequently become unfamiliar.

- **Use scenario-based training:** Simulation has been shown to be critical in promoting safety, mitigating risk, and improving competency in all settings regardless of their pediatric population. If barriers exist that hamper access to onsite simulation, facilities should seek out low-tech, low-cost, and virtual learning resources. Centers of simulation excellence should participate in community outreach in order to bridge the gaps between the simulation "haves" and "have nots."

- **Create incentives**: Incentives for first responders and EMS providers should include the ability to count nursing continuing education hours as EMS continuing education. Requirements for up to 8 hours of pediatric readiness education and training every two years should also be adopted. Legislative action should be considered to set expectations to enhance front line personnel's pediatric disaster capabilities.

- **Collaborate with child injury prevention initiatives**: Child-based injury prevention programs are well-established and long-standing public-private community partners including schools and childcare. Including disaster readiness as a part of local child injury prevention efforts creates opportunities to mitigate the risks associated with all-hazards. Collaboration is known to enhance whole community resilience.

- **Leverage all levels of government leadership (city, county, state, and federal):** All disasters begin as local or regional events. Health care coalition Leaders—in partnership with the AAP's Council on Children and Disaster, Pediatric Centers of Excellence, and EMSC-EIIC—should leverage resources to support cross-discipline, integrated systems and appropriate use of open-source pediatric disaster education.

- **Reduce barriers to engagement**: Create partnerships between pediatric disaster champions with mentors. Improve portability of pediatric disaster continuing education across disciplines that is required for licensure and accreditation. Create online compendia to navigate pediatric disaster educational resources that are open-source, no-cost, and high-quality pediatric emergency and disaster education.

- **Address disparities:** Disaster content creators for pediatric regional centers should partner with low-resource disciplines and critical access communities in order to share high-quality pediatric education. Educational work products should use standardized processes to routinely measure, engage, promote, sustain, and update content.

- **Leverage grant partnerships:** Partner with the Homeland Security Assistance for Fire Fighter grant program to create a grant incentive for fire agencies to establish a PECC. Task the fire-based PECC to participate in local and state EMS for Children programs and serve as a public safety representative for children as part of operational area planning. Connect local champions with SMEs and other resources through virtual networking and engagement.

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Illustrations and Graphics Not Referenced, Courtesy of Microsoft Word Stock Images & Opensource Online Photos

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References

[1] Massoud MR, et.al., *A Framework for Spread: From Local Improvements to System-Wide Change.* IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006. http://www.ihi.org/resources/Pages/IHIWhitePapers/AFrameworkforSpreadWhitePaper.aspx