



LEVELING THE PLAYING FIELD:

A CONCEPT OF OPERATIONS FOR PEDIATRIC DISASTER EDUCATION

Eastern Great Lakes
Pediatric Consortium for
Disaster Response
(EGLPCDR) Education
Workgroup

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WHY A CONCEPT OF OPERATIONS (CONOPS) FOR PEDIATRIC DISASTER EDUCATION?

On average, children comprise one-quarter of a community's population but are rarely considered in whole community threat assessment or disaster preparedness and readiness. As a result, children risk experiencing devastating consequences with long-term adverse effects.

Healthcare providers of all disciplines experience barriers and disparities in acquiring essential knowledge, skills, and abilities to meet children's needs during disasters. These educational gaps exist across all disciplines and result from the unintended consequences of fragmented pediatric disaster education and training initiatives and systems that are disproportionately focused on adults.

While the strategic goal of improving pediatric disaster capability is widely promoted on a national level; communities, emergency managers, public safety, and health care disciplines are not fully engaged in its efforts. This lack of engagement results in uneven pediatric emergency and disaster readiness that is prone to problems and subject to wide variation.

An overarching educational framework to prevent, protect, mitigate, respond and support children's recovery in a disaster is missing. The result is a fragmented pediatric disaster environment that lacks collaboration, competency, and operational confidence across local, state, and federal disaster disciplines. Disaster short and long-term consequences impacting children are simply not systematically integrated into disaster education and training.

The disaster community experiences children as a "niche" population rather than 25% of the whole population and a group that needs to be planned for. A Concept of Operations (CONOPS) is proposed to create a coordinated, sustainable "system" of pediatric disaster education and just-in-time training to improve pediatric disaster education through:

- Providing a framework to identify and address pediatric disaster readiness gaps associated with multi-discipline pediatric disaster education and training.
- Providing tools for pediatric-centric hazard vulnerability, threat assessment, and gap analysis to inform regional pediatric disaster capabilities.
- Creating a model for open-access, low-cost, sustainable, and high-quality pediatric disaster education to reduce barriers to education and training.

- **Facilitating peer-peer networking and collaboration across education and learning stakeholders through the use of incentives that emphasize partnerships and integration.**
- **Engaging pediatric emergency care and disaster stakeholders to collectively contribute enhanced knowledge, skills, and abilities to improve regional pediatric emergency and disaster coordination.**
- **Creating a baseline of metrics to improve the efficiency of pediatric disaster education.**
- **Informing curriculum and policy requirements to support the continuity of pediatric care in rural communities and communities of color, both of which are disproportionately impacted by disasters.**



There are a multitude of exceptional training tools, materials, media, and resources that have been vetted by the nation's pediatric disaster experts. Yet gaps in pediatric disaster education have persisted for decades. It is the conclusion of the Eastern Great Lakes Pediatric Consortium for Disaster Response (EGLPCDR) Education Workgroup that these gaps are primarily the result of inadequate processes to normalize and integrate pediatric disaster readiness into the emergency management culture.

The EGLPCDR Education Workgroup proposes the following Pediatric Disaster Education CONOPS in order to create a framework for a "system" of "operational deployment" of education and training that is supported by local, regional, and federal public-private partnerships. The Assistant Secretary for Preparedness and Response (ASPR) Pediatric Disaster Centers of Excellence have demonstrated that they are well-positioned to lead these coordinated efforts in concert with the EMS for Children's (EMSC) Innovation and Improvement Center (IIC) and Pediatric Readiness Programs such as the Pediatric Disaster Readiness Quality Collaborative (PDRQC).

A Pediatric Disaster Education CONOPS that is focused on the inclusion of children throughout the disaster cycle would level the playing field for all children, especially those who rely day-to-day on community services for food, housing, childcare, and access to health services. Normalizing the inclusion of children across disciplines and disaster planning creates a common operating picture capable of positioning communities and their responders on the front lines for success.

LEVELING THE PLAYING FIELD

Pediatric Disaster Education Concept of Operations



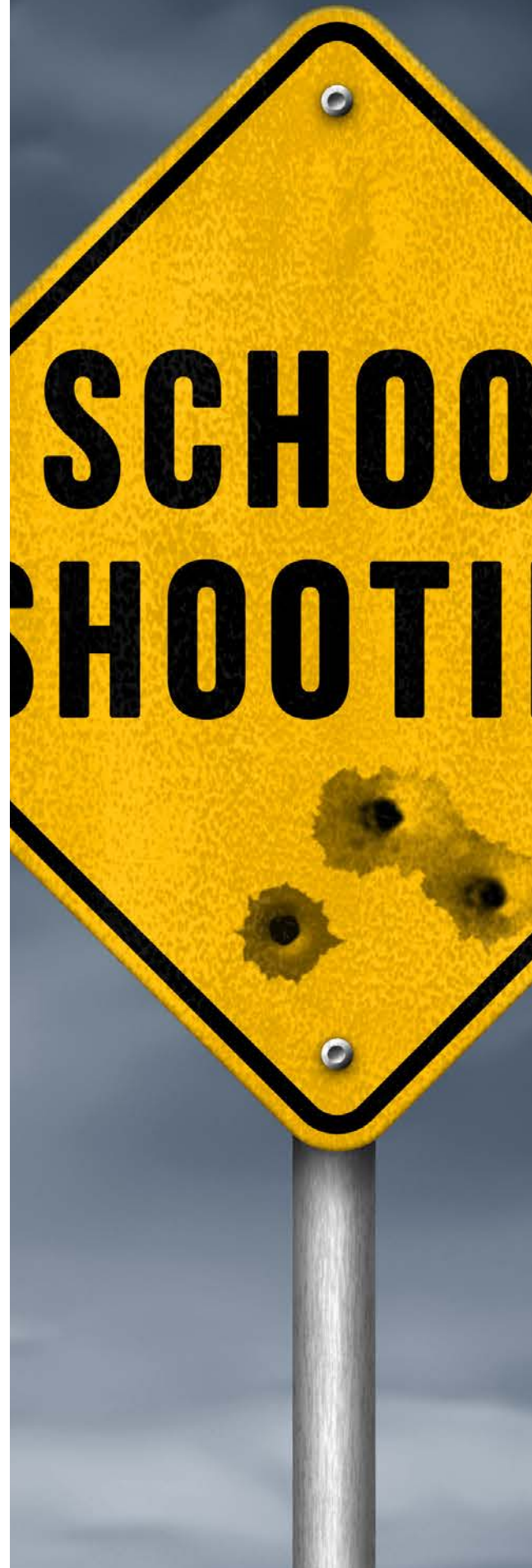


WHOLE COMMUNITY

Health Care Coalitions and Operational Areas need to understand who the children in their community are.

In general, children are 25% of a community population.

They require representation.





SOCIAL DETERMINANTS DISPARITY AWARENESS AND EQUITY

Children in poverty experience food and housing insecurity along with reduced access to health services that worsen their outcomes and ability to recover when disaster strikes.

Children of Color experience higher rates of Adverse Childhood Experiences (ACEs) and have a higher risk of death and disability during disasters due to inequities, poverty, and other social determinants of health.





**CHILDREN AND YOUTH
WITH SPECIAL HEALTH
CARE NEEDS (CYSHCN)
ARE THE MOST
VULNERABLE IN A
DISASTER.**

CYSHCN families have fewer resources to put together a disaster supply of essential items (food, medications, & equipment) or be able to rapidly evacuate.

Family members and care providers of CYSHCN are the experts in their child's care.

They require additional community and health care system support to achieve readiness.





CHILD CENTRIC THREAT AND HAZARD RISK ASSESSMENT

All hazard risk assessments are a routine and essential part of emergency preparedness.

Yet, children are rarely considered as part of These community threat assessments.

A word search for "children" of local, regional, and state disaster plans will disclose how rarely children are considered in these plans.





**PREVENTION
PROTECTION
MITIGATION
RESPONSE &
RECOVERY**

A community's recovery is measured by what happens to its children.

We know that if children are not included in all phases of disaster readiness devastating consequences follow with long term adverse impacts.





COMMUNITY RESILIENCE BEGINS WITH TEACHING CHILDREN TO BE DISASTER-READY.

Children are positive influencers and engage their parents when they learn disaster readiness in school.

Children can become disaster leaders.

Children can learn confidence during an Emergency.

Children who are disaster ready are known to experience less anxiety and experience fewer long term mental health impacts.





MOST CHILDREN ARE SEEN IN COMMUNITY EMERGENCY DEPARTMENTS

**Yet, community
emergency
departments vary in
their pediatric
readiness**

**First-line responders
need routine periodic
just-in-time training
using open-access &
deployable toolkits
that address children's
needs.**





JUST-IN-TIME PEDIATRIC EDUCATION RESOURCES EXIST FOR ALL HAZARDS

**Chemical, Biological,
Radiologic, Nuclear, and
Explosive (CBRNE) training
materials addressing
children are available but
underutilized.**

**When communities limit
disaster readiness to the
most common threats,
first responders are not
provided opportunities to
prepare for the
unexpected.**





**MULTIDISCIPLINE,
ACCESSIBLE & QUALITY,
OPEN-SOURCE,
DEPLOYABLE TRAINING**

To meet the need...

**Sustainable systems of
pediatric disaster
readiness are required:**

**To promote disaster
integration of children
response and recovery
networks, training
priorities should be
focused on
multidisciplinary quality
training that is
open-source, and
easy to deploy.**





**INTEGRATED
METHODOLOGIES
THAT ARE
OPERATIONAL,
UTILIZED, AND
FLEXIBLE...**

Using technology such as gaming, simulation, and virtual reality should be accessible at no or low cost.

They should be designed to enhance pediatric knowledge, skills, and abilities.



PEDIATRIC DISASTER READINESS IS ESSENTIAL TO COMMUNITY RESILIENCY.



Eastern Great Lakes Pediatric Consortium for Disaster Response

Children and Disaster Key References

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- Resilient Children Resilient Communities Toolbox <https://rcrctoolbox.org/>
- National Center for Missing and Exploited Children: Disaster Preparedness and Response <https://www.missingkids.org/ourwork/disasters>
- Institute of Medicine Preparedness, Response & Recovery Considerations for Children and Families <https://bit.ly/2LqkyQj>
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- 2019 Natural Hazards Center Children and Disaster Special Collection: <https://bit.ly/3cDG6oL>
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Pediatric Readiness (hospitals and providers)

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- EMSC Toolkits <https://emscimprovement.center/education-and-resources/toolkits/>
- National Pediatric Readiness Project <https://bit.ly/2IjLlIR>
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- National Center for School Crisis and Bereavement <https://www.schoolcrisiscenter.org/>
- Listen, protect, connect (LPC) Psychological First Aid System
<https://www.fema.gov/media-library/assets/documents/132712>
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Pediatric Simulation and Online Learning

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- OpenPediatrics: <https://www.openpediatrics.org/>

Children Whole Community Disaster Planning

- Save the Children: Disaster Resources Family Emergency Preparedness Get Ready. Get Safe kits and Lesson Books <https://bit.ly/2Z7hfpv>
- Red Cross: Make a Plan <https://rdcrss.org/2WTijAH>
- Red Cross: Pillow Case Project <https://bit.ly/2LnskKZ>
- Red Cross: Child Safety-Before During & After A Disaster <https://rdcrss.org/2xZ2GJe>
- ASPR TRACIE Pediatric Technical Resource <https://asprtracie.hhs.gov/technical-resources/31/pediatric-children/0>
- CDC Caring for Children <https://www.cdc.gov/childrenindisasters/>
- FEMA Ready Kids: <https://www.ready.gov/kids>

Health Care Coalition Pediatric Surge Planning and Toolkits

- Illinois State Pediatric and Neonatal Surge Annex <https://bit.ly/368z9K1>
- Los Angeles County http://file.lacounty.gov/SDSInter/dhs/206938_cms1_206938.pdf
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- Rady Children's Surge Planning Train the Trainer <https://bit.ly/2WtW6nt>
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