# Healthcare Coalition Pediatric Surge Annex Template

The 2019-2023 HPP Funding Opportunity Announcement (FOA) requires Healthcare Coalitions (HCCs) to develop a complementary coalition-level Pediatric Annex to its base medical surge/trauma mass casualty response plan to improve capacity and capabilities to manage a large number of casualties that are children[1]. According to the 2017-2022 Health Care Preparedness and Response Capabilities, HCCs "should promote…members' planning for pediatric medical emergencies and foster relationships and initiatives with emergency departments that are able to stabilize and/or manage pediatric medical emergencies" (Capability 4, Objective 2, Activity 4).

This pediatric-focused operational annex is meant to be an annex to a coalition's HCC Response Plan. It is intended to be a high-level response plan, identifying the experts and specialized resources that exist within the HCC, the mechanisms/ processes that will be used to determine which patients go to which facilities, and an understanding of how many children each facility will need to plan to receive. Each facility is encouraged to develop more detailed plans that support their individual operations, but that level of detail is not necessary in this annex.

This template provides general headers and descriptions for a sample HCC Pediatric Surge Annex Template. The resources used to develop this template include sample HCC plans and the Health Care Preparedness and Response Capabilities. This document is organized as such:

- Sample plan headings/sub-headings;

- Description and considerations (where appropriate, language from the FOA and Health Care Preparedness and Response Capabilities are used; refer to the full text of the capabilities for additional detail/information); and

- Sample resources/plans that may provide guidance or a template for HCCs to assist in their planning efforts. There is no guarantee the resource(s) listed will fully comply with the capability. A sample annex outline is provided in Appendix A of this document. Appendix B includes a full list of resources referenced in this template.

According to the 2019-2023 FOA, HCCs must develop a series of specialty surge annexes to address pediatric, burn, infectious disease, radiation, and chemical emergencies. It is important

---

[1] Pediatric patients are generally those less than 15 years of age, though 16 or 18 years may also be used. Particular attention should be paid in planning for those ages 8 and below and those with complex or congenital conditions.

to consider trauma, illness, surgical, and mental health topics inclusively, since those caring for patients will likely be working on these situations simultaneously. The FOA states, on page 70, "In addition to the usual information management and resource coordination functions, each specialty surge annex framework should be similarly formatted and emphasize the following core elements:

- Indicators/triggers and alerting/notifications of a specialty event

- Initial coordination mechanism and information gathering to determine impact and specialty needs

- Documentation of available local, state, and interstate resources that can support the specialty response and key resource gaps that may require external support (including inpatient and outpatient resources[2])

- Access to subject matter experts (SMEs) – local, regional, and national

- Prioritization method for specialty patient transfers (e.g., which patients are most suited for transfer to a specialty facility)

- Relevant baseline or just-in-time training to support specialty care

- Evaluation and exercise plan for the specialty function."

Resources for helping to identify SMEs are available and include organizations/entities such as the American Academy of Pediatrics, Centers for Disease Control and Prevention Children's Preparedness Unit, children's/pediatric hospitals, Emergency Medical Services for Children Innovation and Improvement Center, state and local Emergency Medical Services for Children programs, and Pediatric Environmental Health Specialty Units. Linkages with primary care/medical home provider groups and medical systems that employ pediatric care providers can also be helpful.

Many state-level plans offer significant assistance with setting expectations for equipment, minimum numbers of pediatric casualties to prepare for, regional planning processes, and other location-specific information.

Additionally, the FOA states that the pediatric annex must consider:

- "Local risks for pediatric-specific mass casualty events (e.g., schools, transportation accidents)

---

[2] Most of the resources are likely NOT located within the healthcare coalition but coordination with those entities will be required for a successful response.

TRACIE

- Age-appropriate medical supplies

- Mental health and age-appropriate support resources

- Pediatric/Neonatal Intensive Care Unit (NICU) evacuation resources and coalition plan

- Coordination mechanisms with dedicated children's hospital(s)."

Prior to developing any emergency operations plan, HCCs should work with jurisdictional emergency management to conduct or participate in a risk assessment/hazard vulnerability assessment and a resource gap analysis to gather the information listed above and understand their risks, hazards, and resources available for a response. It is important to plan for emergency situations that might occur in areas such as places where children routinely spend time separated from their parents, such as early education and child care facilities or camps. Non-medical supplies that will be important to support the care of children should be included in gap assessments.

**NOTE TO COALITIONS**: Although jurisdictions are not required to use this template nor do they need to follow this format, they are encouraged to do so as the planning efforts for children in disasters is very important and complex. There are many acceptable planning methods and document formats. HCCs are encouraged to use this template as it applies to each coalition/ jurisdictional to promote operational planning, though jurisdictions are not required to use this template nor follow this format as long as the elements outlined above are included. The focus of this template is to facilitate the growth of operational capabilities of coalitions. This template can help HCCs develop an annex to the overall Healthcare Coalition Response Plan and is structured in a similar manner, so as to support a seamless response.

ASPR TRACIE also developed HCC Preparedness Plan, Response Plan, and Recovery Plan templates, a Pediatric Topic Collection, and other resources that are helpful for HCCs. For more information, visit https://asprtracie.hhs.gov or contact our Assistance Center at 1-844-5-TRACIE or askasprtracie@hhs.gov.

TRACIE

# 1. Introduction

| Section Headers/ Subheadings | Description and Considerations | Sample Resources |
|---|---|---|
| **1.1 Purpose** | This section describes what the Pediatric Surge Annex will address and the HCC goals and objectives for this annex.<br><br>**Sample language:**<br><br>This annex applies to a mass casualty event with a large number of pediatric patients. It supports the HCC Response Plan by addressing specific needs of children and supporting appropriate pediatric medical care during a disaster. This plan is intended to support, not replace, any existing facility or agency policy or plan by providing uniform response actions in the case of an emergency that involves (or could involve) significant numbers of children. | Pediatric Readiness in the Emergency Department.<br><br>ASPR TRACIE Access and Functional Needs Topic Collection: Population-Specific Resources-Children<br><br>Checklist of Essential Pediatric Domains and Considerations for Every Hospitals Disaster Preparedness Policies (2014) |
| **1.2 Scope** | This section should include:<br>• Timeframe covered by the plan;<br>• Involved coalition and jurisdictional partners;<br>• General command structure and communication protocols; and<br>• Any necessary disclaimers about the plan — not superseding authorities of the participating entities, etc.<br>This section may also describe elements not addressed in the plan and refer the reader to the relevant organizational document, and provide the pediatric age groups used to define the pediatric population and related considerations. | Illinois Department of Public Health ESF 8 Plan: Pediatric and Neonatal Surge Annex (2017)<br><br>Illinois Emergency Medical Services for Children- Pediatric Disaster Preparedness Guidelines for Hospitals (2018) |
| **1.3 Overview/Background of HCC and Situation** | This section should include a general overview of the HCC, including:<br>• Members<br>• Demographics<br>• Healthcare facilities, including regional pediatric transfer facilities and surge capacity<br>• Local risks for pediatric-specific mass casualty events (e.g., schools, transportation accidents)<br>• Pediatric resources or capabilities represented in the coalition (e.g., whether there are children's/pediatric hospitals; which hospitals provide routine pediatric services [Emergency Department], inpatient, have neonatal or pediatric intensive care units), as well as Emergency | Los Angeles County Pediatric Surge Plan (2016) |

TRACIE

| | | |
|---|---|---|
| | Medical Services for Children or pediatric primary care representatives. Also consider pediatric mental health or behavioral health resources. It would also be important to catalogue the healthcare facilities that have inpatient maternity, ante-natal, and post-natal services.<br><br>• Available resources external to the coalition (e.g., pediatric referral centers, sub-specialists, telemedicine capabilities, etc.)<br>• Patient transport resources for inter-facility transfer of patients < 8 years of age and NICU patients.<br>    ○ Note: NICU issues should be covered in a separate section, to include level of nursery and number of beds as well as NICU partners external to the coalition that may need to be engaged in planning or evacuations. This can be listed here or referred to in the "Resources" section of the document.<br><br>This section may also include comparison of healthcare facilities' inpatient projected capacity under normal conditions and projections under surge conditions. | Minnesota Pediatric Surge Primer (2019)<br><br>Regional Pediatric Disaster Surge Framework (2012)<br><br>Stanislaus County Healthcare Emergency Preparedness Coalition, Pediatric Disaster Surge Plan (2019)<br><br>Substance Abuse and Mental Health Services Administration (SAMHSA). (n.d.). Mental Health United States 2010. |
| **1.4 Access and Functional Needs** | This section should include background information on pediatric demographics within the HCC, for example: children and youth with disabilities, special education enrollment, specialty pediatric services (e.g., transplant), numbers of children with serious emotional disturbance currently receiving services, and any other community/regional factors.<br><br>This section may include discussion of medical complexity of these children and highlight the need for any specialized equipment, medication, and providers, and identify those resources.<br><br>This section should also define the population of children using durable medical equipment or that are technology-dependent and any other known groups of children or youth with special healthcare needs and how they will be addressed during a surge event. Information on specialty agencies and transportation may also be included here, as it relates to children and youth with special healthcare needs. | SAMHSA. (n.d.). Serious Emotional Disturbances. |

## 2.    Concept of Operations

| Section Headers/ Subheadings | Description and Considerations | Sample Resources |
|---|---|---|
| **2.1 Activation** | This section should include annex activation levels and indicators/triggers according to the number of pediatric patients or circumstances (child care, camp, or school-related mass casualty incident, etc.). | Contra Costa Health Services, Emergency Medical Services Agency, Pediatric/Neonatal Disaster and Medical Surge Plan and Preparedness Toolkit (2011)

Illinois Department of Public Health ESF 8 Plan: Pediatric and Neonatal Surge Annex (2017)

Illinois Emergency Medical Services for Children- Pediatric Disaster Preparedness Guidelines for Hospitals (2018)

Los Angeles County Pediatric Surge Plan (2016)

Minnesota Pediatric Surge Primer (2019)

Pediatric Disaster Preparedness Guidelines for Hospitals (Third Edition, 2018) |
| **2.2 Notifications** | This section should include the alerting/notification mechanisms of a specialty event including who will be notified, by whom, and how. Content should address communication systems and information management and include notification and coordination mechanisms with dedicated children's hospital(s). | |
| **2.3 Roles and Responsibilities** | This section should provide an outline of roles and responsibilities under the annex for applicable HCC members, stakeholders, and partners. This should include the expected capabilities of each facility for pediatric care as well as define a specific institution or agency to coordinate the response. This may be the same as for an all-hazards plan or may designate a pediatric-specific entity to assist or provide primary coordination for pediatric care.

Designation of a team of pediatric SMEs (to include physicians trained in pediatric critical care, pediatric emergency medicine, children's mental and behavioral health, neonatology, primary care, and surgery– these experts may be local or reachable via telemedicine/telephone) to assist the coordinating entity with pediatric transportation, triage, and medical care issues should be specified in the plan.

This section should also emphasize and discuss the coordination with community pediatric primary care providers who may be actively involved in supporting community-level medical surge. Local Poison Control Centers are also an excellent and trusted community partner.

Identify these team members prior to an event and include experts both within and outside the community that would be available to support a response or provide consultation.  This section should also describe how pediatric expertise is obtained and integrated into longer-term incidents requiring proactive crisis | |

TRACIE

| | | |
|---|---|---|
| | standards of care decision-making. This crisis standards of care system decision making should be consistent with facility, HCC, and state Crisis Standards of Care Plans.<br><br>This section should also include:<br>• Initial coordination mechanism and information gathering to determine impact and specialty transportation and inpatient needs. This should include essential elements of information to be gathered on all patients according to coalition needs (e.g., name, age, weight, injuries/diagnosis, and care requirements for transport [e.g., IV drip medications, oxygen/vent support], and whether the minor has identified parents or a guardian).<br>• Documentation of available local, state, and interstate resources and activation procedures that can support the specialty response as well as key resource gaps that may require external support (including inpatient and outpatient resources). This should also include behavioral health support for patients, families, and staff.<br>• Access to local, regional, and national sub-specialty SMEs. (Note: this is not the same as the assigned pediatric SMEs that support response operations.) | Planning for Children in Disasters: A Hospital Toolkit (2015)<br><br>Regional Pediatric Disaster Surge Framework (2012)<br><br>Stanislaus County Healthcare Emergency Preparedness Coalition, Pediatric Disaster Surge Plan (2019) |
| **2.4 Logistics** | This section should outline the strategies for the HCC and member facilities to address resource shortages and resource allocation, including how resources are requested and potential sources for pediatric-specific resources (e.g., transportation, supply vendors, and caches). This should include a mechanism for resource allocation when supplies are inadequate to meet demand consistent with the HCC Crisis Standard of Care plans. | |

TRACIE

| | |
|---|---|
| 2.4.1 Space | This section can include space strategies and regulatory considerations. Spaces conducive to pediatric care should be identified and can be further categorized:<br>• Conventional spaces: Areas where such care is normally provided (e.g., treatment space inside a hospital or physician office space)<br>• Contingency spaces: Areas where care could be provided at a level functionally equivalent to usual care (adult rooms used as pediatric rooms, closed units)<br>• Crisis spaces: Areas where sufficient care could be provided when usual resources are overwhelmed (this might involve non-pediatric providers and/or ambulatory care pediatric providers supervising inpatient care, temporary intensive care/ventilator support for patients who cannot be moved, or alternative space) |
| 2.4.2 Staff | This section should include strategies for increasing/maintaining staffing levels. Pediatric-trained staff may be assigned to larger numbers of patients, younger patients (e.g., age < 8), or the more injured/ill to closely monitor fluids, medications, and other specific cares. Non -pediatric nursing and other staff would take over patients that require less precise management. Just-in-time training may also be implemented when needed to expand pediatric expertise when the response timeframe allows. Telemedicine may be used as an adjunct for in-person staff. Actions to augment or increase pediatric staffing should be aligned with the existing HCC staff surge plan.<br><br>This section could also include a discussion of how to engage and use primary care providers and provide care for children in their medical homes, especially in disasters involving slowly evolving infectious diseases or other scenarios where diversion from hospitals is possible. |
| 2.4.3 Supplies | This section should document the coalition-level equipment expectations of member healthcare facilities relevant to a pediatric surge event (age-appropriate medical and non-medical supplies) and coalition-level strategies to ensure adequate levels of supplies and equipment are available. This section may also |

TRACIE

| | | |
|---|---|---|
| | include coalition-level pharmacy and dietary considerations. Any regional pediatric caches of material for an MCI should be noted.<br><br>This section should include coalition-level strategies for providing medical countermeasures for children. Children need appropriate formulations (e.g., liquids), delivery devices (eg, pediatric auto-injectors), and age- or size-based dosing instructions. | |
| **2.5 Special Considerations** | | |
| 2.5.1 Behavioral Health | This section should include considerations for access to continuum of stepped-care mental health services for children, caregivers, and providers. Consider sub-sections by age of child and listing of regional and extra-regional resources for augmentation of pediatric behavioral health services (e.g., use of "strike teams"). Access to social workers, counselors, school and child care personnel, and other resources to assure the ongoing support and safety of the children may also be included. | ASPR TRACIE Pediatric Topic Collection: Mental and Behavioral Health<br><br>National Children's Disaster Mental Health Concept of Operations (2011) |
| 2.5.2 Decontamination | This section should include specific decontamination capabilities at pediatric-capable facilities, but ALL facilities should be prepared to decontaminate children and adults. This capability includes having age-appropriate carry/ immobilization devices, the ability to decontaminate parents and children together, strategies for escorting unaccompanied children, and the use of child-friendly soaps and non-abrasive cloths. This section can also include a link to recommendations/ considerations to facilitate decontamination of children presenting at hospitals during a disaster.<br><br>The HCC should work with ALL hospitals to assure that pediatric decontamination issues are addressed in the hospital plans and equipment. | ASPR TRACIE Hospital Patient Decontamination Topic Collection: Pediatric<br><br>ASPR TRACIE Pre-Hospital Patient Decontamination Topic Collection: Pediatric Considerations |
| 2.5.3 Evacuation | This section should address evacuation coordination for pediatric patients, including Pediatric/Neonatal Intensive Care Unit (NICU) evacuation resources and plan for patient movement including coordination with specialty and referral partners outside the coalition boundaries. | ASPR TRACIE Healthcare Facility Evacuation/ Sheltering Topic Collection: Special Populations- |

| | | |
|---|---|---|
| | Identify receiving facilities internal and external to the coalition, how transfer information will be shared, and bed prioritization and coordination throughout the region.<br><br>This section should be consistent with any general HCC level evacuation and patient movement plans. | Pediatric, NICU, and OB/GYN Related Resources<br><br>ASPR TRACIE VHF-Ebola Topic Collection: Pediatric Issues<br><br>Near-Term Strategies to Improve Pediatric Surge Capacity During Infectious Disease Outbreaks (2012)<br><br>Pediatric Surge Planning: Train the Trainer |
| 2.5.4 Special Pathogens | This section should address the coalition plan for management and care of those children exposed or potentially exposed to a highly infectious disease (and minimize exposure to others, including caregivers and healthcare personnel). Should integrate with existing / future HCC Infectious Disease Response Plan and discuss key partners and stakeholders involved in response activities and any specific care and behavioral considerations. Referral plans for pediatric transport to a regional treatment center should be included. | |
| 2.5.5 Security | This section should address resources for increased security at hospitals and should include planning for pediatric safe areas, family reunification sites, and the incident scene when children are present, as well as liaisons and resources provided by local law enforcement.  Detailed plans for security at the facility / agency level should also consider protecting children against kidnapping and predation, and include checklists for childproofing areas that are not intended for pediatrics. The HCC should ensure plans exist at all facilities for keeping children with parents or caregivers as much as possible. | |
| **2.6 Operations- Medical Care** | | |
| 2.6.1 Triage | This section should include considerations for triage of pediatric patients and expectations for hospital transport including patient allocation by number of patients, age, and severity priority. For example, if there is a children's hospital, the most critically ill/injured and youngest or those with complex or congenital conditions should generally have priority for transport to those centers. Priorities may be different depending on severity of incident and age (e.g., a teenaged patient with critical trauma may go to the nearest appropriate trauma center).<br><br>Where possible or dictated by state and local transport protocols, consider triage and transport to urgent care centers or referrals to primary care as appropriate to decompress emergency departments. | Pediatric Emergency Quick Reference Guide (2015)<br><br>Pediatric Surge Quick Reference Guide (2012)<br><br>Pediatric Surge Pocket Guide (2009) |

T R A C I E

| | | |
|---|---|---|
| | After medical triage, psychological triage should also be conducted using evidence-based triage protocols to link high-risk children to timely assessment and care. | SAMHSA. (2016). Stronger Together: An In-Depth Look at Selected Community-Level Approaches to Disaster Behavioral Health<br><br>National Children's Disaster Mental Health Concept of Operations (2011)<br><br>Code Triage: Integrating the National Children's Disaster Mental Health Concept of Operations Across Health Care Systems (2014) |
| 2.6.2 Treatment | This section should include considerations for treatment of pediatric patients, including how information on patients will be shared and transfers prioritized when the demand for specialty services or transport exceeds supply. It should also include how pediatric specialty consultation will be obtained by hospitals that are temporarily caring for complex patients and/or a large number of pediatric patients to ensure the best care possible (e.g., telemedicine, or in some cases bringing specialty providers from a referral facility for consultation).<br><br>Establish a process for regional level clinical management that addresses how information from SMEs, poison centers, and other specialists can be shared during an incident with hospitals, community clinicians, and others to aid in caring for children throughout the affected area.<br><br>Rehabilitation services and coordination of continued care following the surge event should be discussed, including procedures for repatriation of any patients transferred out of the area. | |
| **2.7 Transportation** | This section should include considerations for safe inter-facility transport of stable, unstable, and potentially unstable pediatric patients and prioritization methods for specialty patient transfers (e.g., which | |

| | | |
|---|---|---|
| | patients are most suited for transfer to a specialty facility and how to prioritize them – this will need to involve pediatric SMEs with knowledge of the children requiring transfer). | |
| **2.8 Tracking** | This section should include the coalition strategies for patient tracking. It may also address accompanied, unaccompanied/displaced children, and protocols for identifying displaced children in a disaster. | |
| **2.9  Reunification** | This section should include coalition strategies for reunification of children and families and notification to proper county services (e.g., child protective services) including any policies on threshold of documentation for release of a child to family and documentation and interface of the hospital family support center(s) with the functions of the community family assistance center.<br><br>(Note: HCCs should ensure healthcare facilities and community sites plan for appropriate patient supervision in a pediatric safe area [for unaccompanied children who have concluded their medical care or have parents that are injured and unable to care for them] and hospital family information center/support center. Appropriate staffing may be needed to support these operations for an extended period. Special planning for children in foster care and in the juvenile justice system who could be affected by an MCI may also be needed.) | ASPR TRACIE  Tips for Healthcare Facilities: Assisting Families and Loved Ones after a Mass Casualty Incident<br><br>ASPR TRACIE Family Reunification and Support Topic Collection |
| **2.10 Deactivation and Recovery** | This section should include considerations for deactivation of the annex, continuity in recovery efforts, the after action report process, analysis and archiving of incident documentation to assure the pediatric perspective and issues are addressed, roles and responsibilities for continued pediatric and school behavioral health support, and assistance with reimbursements as applicable. | NCR Plan for Management of Pediatric Patients in an Emergency |

TRACIE

# 3. Appendices

| Section Headers/ Subheadings | Description and Considerations | Sample Resources |
|---|---|---|
| **3.1 Training and Exercises** | This section should include relevant baseline or just-in-time training to support pediatric surge care and evaluation and exercise plan for pediatric surge. | ASPR TRACIE Pediatric Topic Collection: Education and Training |
| **3.2 Legal Authorities** | List applicable legal authorities/regulatory information specific or relevant to the pediatric population. May also include questions and issues that may arise during a disaster for example regarding, unaccompanied/displaced children, HIPAA rules, release of children to a caregiver, etc. | ASPR TRACIE Healthcare-Related Disaster Legal/ Regulatory/ Federal Policy Topic Collection |
| **3.3 Pediatric Referral Resources** | Applicable resources specific to pediatric surge needs, referrals, etc. | |
| **3.4 Additional Resources/ References** | Applicable plans, tools, templates and/or resources used to develop the HCC Pediatric Surge Annex. | |

TRACIE

# Appendix A: Healthcare Coalition Pediatric Surge Annex Outline Example

## 1. Introduction

1.1 Purpose

1.2 Scope

1.3 Overview/Background of HCC and Situation

1.4 Access and Functional Needs

## 2. Concept of Operations

2.1 Activation

2.2 Notifications

2.3 Roles and Responsibilities

2.4 Logistics

> 2.4.1 Space
> 2.4.2 Staff
> 2.4.3 Supplies

2.5 Special Considerations

> 2.5.1 Behavioral Health
> 2.5.2 Decontamination
> 2.5.3 Evacuation
> 2.5.4 Infection Control
> 2.5.5 Security

2.6 Operations – Medical Care

TRACIE

# 3. Appendices

T R A C I E

# Appendix B: Resources

ASPR TRACIE Developed Resources:

- ASPR TRACIE Pediatric Topic Collection
- ASPR TRACIE Pediatric Issues in Disasters Webinar

American Academy of Pediatrics (AAP) Resources:

American Academy of Pediatrics. (2013). Pediatric Preparedness Resource Kit.

> This kit allows pediatricians, public health leaders and other pediatric care providers to assess what is happening in their community or state, and help determine what needs to be done before an emergency or disaster (e.g., a pandemic). The kit also promotes collaborative discussions and decision making about pediatric preparedness planning.

American Academy of Pediatrics. (2013). Preparedness Checklist for Pediatric Practices.

> This document offers checklists and steps that pediatricians or their practice staff can take to improve office preparedness. It allows for advanced preparedness planning that can mitigate risk, ensure financial stability, strengthen the medical home, and help promote the health of children in the community.

American Academy of Pediatrics. (2018). Pediatric and Public Health Preparedness Exercise Resource Kit.

> This resource kit was developed through a collaboration between the American Academy of Pediatrics and the Centers for Disease Control and Prevention. Its purpose is to "provide the tools and templates to make it easier for states, communities, hospitals, or healthcare coalitions to conduct a pediatric tabletop exercise, which provides participants with the opportunity to discuss and assess preparedness plans and capabilities for a disaster that affects children."

American Academy of Pediatrics. (2019). Children's Hospitals and Preparedness Webinar Series.

> The AAP created this webinar series in collaboration with the Centers for Disease Control and Prevention to promote a dialogue among clinicians and disaster planners at children's hospitals and to improve each hospital's response plans and ability to care for children in an emergency.

American Academy of Pediatrics, in collaboration with Massachusetts General Hospital, Center for Disaster Medicine. (2018). Family Reunification Following Disasters: A Planning Tool for Health Care Facilities.

> This planning tool was created to assist hospitals with their plans to provide information, support services, and safe reunification assistance to family members of patients who

have experienced disasters. It provides potential solutions to reunification-related challenges, including: planning for the secure reception, tracking, and care of large numbers of children who may present to a hospital following a mass-casualty event; identifying injured and unaccompanied children in a disaster; tracking unaccompanied children during their hospital stay; and what legal authority a hospital has to administer care to minors when the parent/guardian is unavailable to participate in the informed consent process.

American Academy of Pediatrics, Needle, S. and Wright, J. (2015). Ensuring the Health of Children in Disasters. American Academy of Pediatrics. 136(5): e1407-e1417.

This policy statement addresses how pediatricians and others involved in the care and well-being of children can prepare for and mitigate the effects of disasters, encourage preparedness and resiliency among children and families and within communities, and ensure that children's needs, including those of children and youth with special healthcare needs, are not neglected in planning, response, and recovery efforts.

American Academy of Pediatrics, Remick, K., Gausche-Hill, M., Joseph, M.M., at al. (2018). Pediatric Readiness in the Emergency Department. Pediatrics. 142(5).

This Policy Statement defines the recommended resources Emergency Departments need to be prepared to treat pediatric patients.

Chung, S., Foltin, G., and Schonfeld, D.J. (2019). Pediatric Disaster Preparedness and Response Topical Collection: Emerging Infectious Diseases. American Academy of Pediatrics.

This chapter is included in the AAP Pediatric Disaster Preparedness and Response Topical Collection.The chapter describes the importance of being prepared to safely care for pediatric patients with highly hazardous communicable, as emerging and re-emerging infectious diseases are a constant threat to pediatric health care worldwide.

Chung, S., Foltin, G., and Schonfeld, D.J. (2019). Pediatric Disaster Preparedness and Response Topical Collection: How Children are Different. American Academy of Pediatrics.

This chapter is included in the AAP Pediatric Disaster Preparedness and Response Topical Collection. The chapter describes the unique anatomic, physiologic, immunologic, developmental, and psychologic considerations that potentially affect children's vulnerability to injury and response in a disaster.

Chung, S., Foltin, G., and Schonfeld, D.J. (2019). Pediatric Disaster Preparedness and Response Topical Collection: Mental Health Issues. American Academy of Pediatrics.

This chapter is included in the AAP Pediatric Disaster Preparedness and Response Topical Collection. This chapter describes the roles that pediatricians and other health professionals that care for children will play in identifying and addressing the mental health needs of children and families in a disaster or terrorist event.

Chung, S., Foltin, G., and Schonfeld, D.J. (2019). Pediatric Disaster Preparedness and Response Topical Collection: Pediatric Preparedness Exercises. American Academy of Pediatrics.

This chapter is included in the AAP Pediatric Disaster Preparedness and Response Topical Collection. This chapter describes the many types of exercises that can be completed to help an organization test a hypothetical situation, such as a natural or man-made disaster, and evaluate the group's ability to cooperate and work together and to test their readiness to respond.

Davies, H. and Byington, C. (2016). Parental Presence During Treatment of Ebola or Other Highly Consequential Infection. Pediatrics. 138(3).

This clinical report from the American Academy of Pediatrics Committee on Infectious Diseases presents options for meeting the needs of patients and their families while posing the least risk to healthcare providers and facilities.

Disaster Preparedness Advisory Council. (2016). Medical Countermeasures for Children in Public Health Emergencies, Disasters, or Terrorism. Pediatrics. 137(2).

The Council shares that many medical countermeasures (MCM) are more likely to be approved for adult use and may not take the unique needs of children into account. They drafted this policy statement to suggest recommendations that address the gaps for the development and use of MCMs in children during public health emergencies or disasters.

Hinton, C.F., Davies, H.D., Hocevar, S.N., et al. (2016). Parental Presence at the Bedside of a Child with Suspected Ebola: An Expert Discussion. Clinical Pediatric Emergency Medicine. 17(1):81-86.

This article demonstrates the challenges and weighing of risks and benefits involved in the consideration of parental presence at the bedside of a child suspected of having Ebola.

Schonfeld, D.J., Demaria, T., and the Disaster Preparedness Advisory Council and Committee on Psychosocial Aspects of Child and Family Health. (2015). Providing Psychosocial Support to Children and Families in the Aftermath of Disasters and Crises. Pediatrics. 136(4):E1120-E1130.

The American Academy of Pediatrics released this clinical report urging pediatricians to look for common adjustment problems in children following a disaster or crisis, and to

TRACIE

promote effective coping strategies to ease the impact of the event. The report stresses the importance of ensuring basic support services, psychological first aid, and professional self-care while working with patients and families in the wake of disaster.

## HCC-Level Pediatric Plans

National Capital Region. (2019). NCR Plan for Management of Pediatric Patients in an Emergency.

Stanislaus County. (2019). Healthcare Emergency Preparedness Coalition, Pediatric Disaster Surge Plan.

## HCC Pediatric Planning Templates and Resources

DC Emergency Healthcare Coalition. (n.d.). Initial Management Guidelines for Pediatric Burn Patients.

These templates--part of the National Capital Region Burn Mass Casualty Incident Response Plan--can help healthcare providers care for pediatric burn patients.

Dodgen, D., Anderson, M., Edgerton, E., et al. (2013). Pediatric Preparedness for Healthcare Coalitions. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

This 90-minute webinar provides an introduction to healthcare system preparedness for children, and a national perspective on preparedness for children in disasters. Presenters also cover improving the emergency care system for children, perspectives on creating a multi-state coalition for pediatric surge, and New York City Pediatric Disaster Coalition operational pediatric disaster planning.

Frogel, M., Flamm, A., Sagy, M., et al. (2017). Utilizing a Pediatric Disaster Coalition Model to Increase Pediatric Critical Care Surge Capacity in New York City. Disaster Medicine and Public Health Preparedness. 11(4): 473-478.

The authors describe the stepwise development of the NYC Pediatric Disaster Coalition as a model for other cities to replicate in planning for pediatric disaster patients. They also discuss how the coalition supported hospitals in planning for pediatric surge.

Hansen, C., Dodgen, D., Levine, C., et al. (2014). Pediatric Preparedness for Healthcare Coalitions: Part II. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

This 90-minute webinar reviews resources, strategies, and partnerships used by medical planners and healthcare coalitions to strengthen pediatric components of their

TRACIE

jurisdiction's healthcare preparedness capabilities. Included are lessons learned from the response to Superstorm Sandy and the Alaska Shield/Hale Borealis exercise.

Minnesota Department of Health. (2014). Patient Care Strategies for Scarce Resource Situations Card Set.

This card set can be used as a decision support tool and was developed to facilitate a structured approach to resource shortfalls at a healthcare facility. Pediatrics Resource Cards and Pediatrics Triage Cards are provided in Section 10.

Schreiber, M., Pfefferbaum, B, and Sayegh L. (2012). Toward the Way Forward: The National Children's Disaster Mental Health Concept of Operations. (Abstract only.) Disaster Medicine and Public Health Preparedness. 6(2):174-81.

The authors identify critical gaps in pediatric triage and treatment strategies during disaster response. This report provides an outline for a triage-driven children's disaster mental health incident response strategy.

Schreiber, M., Shields, S., Formanski, S., et al. (2012). Code Triage: Integrating the National Children's Disaster Mental Health Concept of Operations Across Health Care Systems. Academic Emergency Medicine. 18:s59.

The authors identify three key concept of operations strategies that provide an integrated "disaster systems of care": (1) the PsySTART Disaster Mental Health Triage System, (2) a childfocused Incident Action Plan, and (3) a continuum of risk stepped-care model that matches the level of evidence-based treatment interventions with the level of identified risk using a stepped-care framework.

## Regional and State-Level Pediatric Plans and Resources

Central Valley, CA. (2012). Regional Pediatric Disaster Surge Framework. California Hospital Association.

This document provides a framework for community collaboration to develop regional, comprehensive, integrated pediatric preparedness response plans.

Contra Costa Health Services Emergency Medical Services Agency. (2011). Contra Costa Pediatric/Neonatal Disaster and Medical Surge Plan and Preparedness Toolkit.

This toolkit was developed to facilitate disaster preparedness that involves the practice of including neonates and pediatrics in all county, provider agency, and hospital-based disaster exercises. It provides an example of implementing emergency medical services for children guidelines at the local level.

TRACIE

Illinois Department of Public Health. (2017). Pediatric and Neonatal Surge Annex.

> This plan provides a detailed framework for various stakeholders involved in an emergency response within the State of Illinois and surrounding states in order to protect children and provide appropriate pediatric medical care during a disaster. The plan can be used to guide a state-level response and provides local medical services guidance on the care of children, including patient movement, system decompression, recommendations for care, and resource allocation during a surge of pediatric patients. It includes several tools such as transfer forms and algorithms.

Los Angeles County Emergency Medical Services Agency. (2016). Los Angeles County Pediatric Surge Plan. California Hospital Association.

> This plan provides details on how each hospital within Los Angeles County would support a pediatric surge of patients including surge targets, supplies, and patient type. This plan also includes parameters for transporting children from prehospital field operations to healthcare facilities and transferring of patients among hospitals.

Minnesota Department of Health. (2019). Minnesota Pediatric Surge Primer and Template Plan.

> This customizable template is geared for small community hospitals that do not usually provide pediatric trauma or inpatient services. It provides guidance and templates that facilities and regions can follow to plan for pediatric patients in a mass casualty event.

Texas Trauma Service Area (TSA) B. (2016). Trauma Service Area - B (BRAC): Regional Pediatric Plan.

> This plan provides prehospital and hospital providers with regional standardized procedures for the treatment of pediatric patients. It addresses various issues to include: prehospital triage, helicopter activation, inter-hospital transfers, pediatric trauma triage/ transfer decision scheme, among others topics.

Western Region Homeland Security Advisory Council. 2017). Children in Disasters Emergency Preparedness: Family Reunification Plan Template.

> This template can be used by any organization (e.g., hospitals, educational institutions, and day care centers) to develop a family reunification plan. It addresses information on topics including reunification protocols, legal authorities, terminology, methods of reunification, and coordination of efforts with key stakeholders.

TRACIE

## Hospital/Healthcare Pediatric Plans and Resources

Bradin, S., Lozon, M., Butler, A., et al. (2015). Planning for Children in Disasters: A Hospital Toolkit. Michigan Department of Health and Human Services.

> This toolkit includes information to assist hospitals with planning for the needs of children through all stages of a disaster. Guidance covers medical surge and triggers; staffing plans; triage protocols; decontamination; transport of pediatric patients; chemical agents and antidotes; infection protection; family reunification; and psychological support.

Illinois Emergency Medical Services for Children. (2009). Neonatal Intensive Care Unit (NICU) Evacuation Guidelines.

> These neonatal intensive care unit (NICU) evacuation guidelines were developed by professionals throughout Illinois. A multi-disciplinary committee was also convened to collate personal experiences, recommendations, and current literature on NICU evacuations. This guide is intended to assist healthcare providers assess pre-event vulnerabilities and plan for the evacuation of medically fragile Level III NICU patients while addressing core components of incident management, in conjunction with the promotion of patient safety and evacuation procedures based on lessons learned from past disasters and experiences.

NYC Pediatric Disaster Coalition. (2018). NYC Pediatric Disaster Healthcare Preparedness Toolkit – Hospitals.

> This webpage includes links to guidelines and templates designed for pediatric providers to create disaster plans at their individual healthcare sites. It also offers comprehensive information on how to conduct exercises that can be used for plan revision and improvement within the context of overall disaster preparedness.

Rady Children's Hospital, San Diego. (2011). Pediatric Surge Planning: Train the Trainer.

> This online course provides an in-depth overview of the special considerations associated with pediatric surge planning. The authors describe hospital incident command system activation, specific tools and actions linked to pediatric surge, and provide tips for developing a surge plan.

Seattle and King County Public Health Department. (2010). Hospital Guidelines for Management of Pediatric Patients in Disasters.

> This toolkit is based on an earlier version developed by the New York City Department of Health and Mental Hygiene and includes considerations for staffing and training, resources, security, transportation, decontamination, hospital-based triage, and inpatient bed planning.

## Pediatric Planning Checklists

Abraham, H. (2014). Planning for Pediatrics in Disasters. Journal of Emergency Medical Services.

> The author encourages emergency medical planners to account for children's' unique physical, psychological, and communication needs when drafting pre-hospital emergency response plans. She also shares pediatric-specific care tips for decontamination, triage, airway procedures, drug dosage and delivery, and psychological care.

American Academy of Pediatrics. (2013). Pediatric Preparedness Resource Kit.

> This kit allows pediatricians, public health leaders and other pediatric care providers to assess what is happening in their community or state, and help determine what needs to be done before an emergency or disaster (e.g., a pandemic). The kit also promotes collaborative discussions and decision making about pediatric preparedness planning.

California Hospital Association. (2010). EMSC Pediatric Disaster Preparedness Guidelines: Hospitals.

> This standards document is based on The Joint Commission and other national requirements for hospitals, tailored for pediatric issues.

EMSC. (n.d.). Checklist: Essential Pediatric Domains and Considerations for Every Hospital's Disaster Preparedness Policies.

> This Checklist is intended to be used as a tool to help hospital administrators and leadership incorporate essential pediatric considerations into existing hospital disaster policies. This publication is available in two versions: static pdf and interactive pdf.

Illinois Emergency Medical Services for Children. (2010). Hospital Pediatric Preparedness Checklist.

> All hospitals need to assure that they are prepared to handle the unique needs of children in a disaster event. As hospitals develop their emergency operations plans, Illinois EMSC recommends the inclusion of pediatric components in several key areas. This checklist was designed to help hospitals identify their current level of pediatric preparedness and recognize additional opportunities for improvement.

Illinois Emergency Medical Services for Children. (2005). Pediatric Disaster Preparedness Guidelines

> This document was created to promote awareness of children's unique vulnerabilities in a disaster or mass casualty incident and to guide organizations in integrating pediatric

considerations into their disaster plans. Implementing these recommendations and guidelines is only the first step in improving emergency and disaster preparedness for children.

National Advisory Committee on Children and Disasters. (2015). Healthcare Preparedness for Children in Disasters: A Report of the NACCD Healthcare Preparedness Working Group.

This report was developed in response to a tasking by the U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) to assess the readiness to care for children affected by disasters. It focuses on three key areas: coalition building, workforce development, and medical countermeasure readiness.

National Association of State EMS Officials. (2014). Checklist Tool for Pediatric Disaster Preparedness.

Derived from the 2010 report of the National Commission on Children and Disasters, this document is a tool for State EMS Offices to establish standards for EMS providers and agencies.

## Other Relevant Resources

Committee for Tactical Emergency Casualty Care. (2015). Pediatric Tactical Emergency Casualty Care.

This resource provides guidelines for the immediate on-scene stabilization of victims, depending on whether or not there is an ongoing threat to safety.

Illinois Emergency Medical Services for Children. (2013). NICU/Nursery Evacuation Tabletop Exercise Toolkit.

This toolkit provides various resources and tools developed specifically for exercises, and offers guidance on planning, conducting, and evaluating tabletop exercises focused on the neonatal intensive care unit and nursery population.

Laraque, D., Jensen, P., and Schonfeld, D.J. (2006). Feelings Need Check-ups Too Toolkit. American Academy of Pediatrics.

This toolkit can help practitioners intervene effectively with children experiencing emotional distress related to catastrophic events. Various screening tools are demonstrated through case studies, and treatment options are described, along with information on accessing mental health resources for treatment referrals.

TRACIE

The National Child Traumatic Stress Network. (2018). For Teens: Coping after Mass Violence.

This fact sheet identifies emotions and reactions that teens might experience after witnessing and surviving a traumatic event. It also addresses expectations that others may have and challenges and opportunities for recovery. Self-care is emphasized in addition to connecting with community partners and locations that offer support.

TRACIE