

## ASPR TRACIE Technical Assistance Request

**Requestor:**

**Requestor Phone:**

**Requestor Email:**

**Request Receipt Date (by ASPR TRACIE):** 22 May 2015

**Type of TA Request:** Standard

**Request:**

Requestor is inquiring if ASPR TRACIE is aware of any pediatric disaster preparedness resources within ASPR TRACIE that may aid research efforts by the National Advisory Committee on Children and Disasters (NACCD).

NACCD is currently working on a health care preparedness task to assess the current state of readiness of hospitals, health care systems, and EMS to care for children during disasters. ASPR TRACIE resources will supplement existing resources being collected by NACCD and Alicia Livinski, NIH.

**Response:**

The following resources related to pediatrics during disasters/ emergencies are included in existing comprehensively developed ASPR TRACIE Topic Collections and in the Pediatrics Topic Collection (not yet comprehensively developed). Additional resources will be available as the ASPR TRACIE Team and Subject Matter Expert (SME) Cadre continues to develop all the Topic Collections (which some will include resources specific to pediatrics), including the Pediatrics Topic Collection. We anticipate all Topic Collections to be comprehensively developed by December 2015.

Hyperlinks are provided in the title. This response was prepared by Audrey Mazurek, ICF TRACIE Deputy Project Director.

**Access and Functional Needs**

Agency for Healthcare Research and Quality. 2006. [Pediatric Terrorism and Disaster Preparedness: A Resource for Pediatricians.](#)

This resource is intended primarily to educate, inform, increase awareness among, and assist pediatricians in recognizing and fulfilling their important roles in disaster preparedness and response. Families and communities turn to pediatricians for anticipatory guidance on all issues involving children. Pediatricians can help families plan their response to disaster by referring them to available resources.

Centers for Disease Control and Prevention. 2013. [Caring for Children in a Disaster.](#)

Parents, teachers, doctors and nurses are just some of the people who can help children get ready for and cope with disasters. Parents and parents-to-be can prepare so that the family can stay as safe as possible during and after a disaster. Schools and childcare centers can stay prepared, too. These comprehensive resources help the whole community address the unique needs of children in disasters.

Centers for Disease Control and Prevention. 2010. [Coordinating Pediatric Medical Care During an Influenza Pandemic: Hospital Workbook.](#)

This workbook is intended to assist hospitals with coordinating medical care for pediatric influenza like illness (ILI) across their community. Although many of the suggestions were based on experiences with the 2009 H1N1 pandemic, this tool can be adapted for use during pandemic spread of a novel influenza virus. This tool is presented in two sections, identified by type of hospital focus: Children's Hospital Focus and General Hospital Focus.

Centers for Disease Control and Prevention. 2009. [Pandemic Influenza Pediatric Office Plan Template.](#)

This Pandemic Influenza Pediatric Office Plan Template is a planning tool developed by pediatric stakeholders that is intended to assist pediatric medical offices that have no pandemic influenza plan in place, but may experience an increase in patient calls/visits or workload due to pandemic influenza. The suggestions and samples contained within this document were collected from a team of pediatric experts during a stakeholder meeting in September 2009. It is designed to be tailored by a private practice office planning team to the needs of the practice to identify and plan for potential modifications to current decision making process. In addition, this tool can also be adapted both for use during pandemic spread of a novel respiratory virus and as a planning tool for future pandemic respiratory virus events.

National Emergency Medical Services for Children Program. 2014. [Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Preparedness Policies.](#) (interactive and [non-interactive versions](#) available)

This checklist is intended as a tool to help hospital administrators and leadership incorporate essential pediatric considerations into existing hospital disaster policies and plans.

National Emergency Medical Services for Children Program. 2013. [National Pediatric Readiness Project.](#)

The National Pediatric Readiness Project is a multi-phase quality improvement initiative to ensure that all U.S. emergency departments (ED) have the essential guidelines and resources in place to provide effective emergency care to children. The first phase of this project will be a national assessment of EDs' readiness to care for children.

National Emergency Medical Services for Children Program. 2012. [Kids in Disasters: Facing Our Challenges](#).

This archived webcast highlights innovations in pediatric disaster preparedness including innovative reunification systems and triage algorithms.

U.S. Government Accountability Office. 2013. [National Preparedness: Efforts to Address the Medical Needs of Children in a Chemical, Biological, Radiological, or Nuclear Incident](#).

GAO was asked about efforts to address the needs of children in the event of a CBRN incident. This report examines (1) the percentage of CBRN medical countermeasures in the SNS that are approved for pediatric use; (2) the challenges HHS faces in developing and acquiring CBRN medical countermeasures for the pediatric population, and the steps it is taking to address them; and (3) the ways that HHS has addressed the dispensing of pediatric medical countermeasures in its emergency response plans and guidance, and ways that state and local governments have addressed this issue.

U.S. Department of Health and Human Services. 2012. [The Children's HHS Interagency Leadership on Disasters Working Group Summary of Recommendations and Implementation Efforts](#).

The U.S. Department of Health and Human Services (HHS) established the Children's HHS Interagency Leadership on Disasters (CHILD) Working Group in 2010 to identify and comprehensively integrate the activities related to the needs of children across all HHS inter- and intra-governmental disaster planning activities and operations

### **Decontamination**

Children's Hospital Boston. (2005). [Decontamination of Children](#). U.S. Department of Health and Human Services, Chemical Hazards Emergency Medical Management.

This scenario-based video shares specific considerations for caring for pediatric patients who require decontamination.

Freyburg, Cl, Arquilla, B., Fertel, B., et al. (2008). [Disaster Preparedness: Hospital Decontamination and the Pediatric Patient](#). Prehospital Disaster Medicine. 23 (2)166-172.

The authors discuss the medical and psychological planning needs associated with children and chemical decontamination. They developed an algorithm that includes steps for ambulatory and non-ambulatory patients.

U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. (2005). [Decontamination of Children](#).

This video explains how children differ from adults physically and emotionally, and provides recommendations for pediatric decontamination.

## **Ebola**

American Academy of Pediatrics. (2014). [Ebola FAQs](#).

This information is geared towards healthcare professionals who work with children. It explains how the Ebola virus presents in children, how it progresses, how it is transmitted and treated, and how parents can talk to children about Ebola.

Centers for Disease Control and Prevention. (2015). [Q&A's about the Transport of Pediatric Patients \(< 18 years of age\) Under Investigation or with Confirmed Ebola](#).

This webpage is intended to provide first responders with information to help protect themselves, younger patients, and patients' family members by answering the most frequently asked questions.

Olupot-Olupot, P. (2015). [Ebola in Children: Epidemiology, Clinical Features, Diagnosis and Outcomes](#). Pediatric Infectious Disease Journal, 34(3):314-6.

The author looks at the current and past Ebola outbreaks and focuses infection and how it presents, is diagnosed, and treated in children.

## **Hospital Surge Capacity and Immediate Bed Availability**

Alabama Department of Public Health. (2010). [Multi-State, Multi-Organizational Solution to Limited Regional Pediatric Medical Surge Capacity in the Southeastern United States](#).

The speakers in this webcast share strategies for addressing obstacles associated with pediatric surge.

Boyer, E., Fitch, J., and Shannon, M. (2009). [Pediatric hospital surge capacity in public health emergencies](#). Agency for Healthcare Research and Quality.

The recommendations contained in this document can help medical professionals develop tailored responses to mass casualty events involving pediatric patients.

Frost, P. (2010). [Pediatric Surge Planning: Solutions Within Reach](#). Sacramento, CA: California Hospital Association 2010 Disaster Conference.

The author stresses the importance of community hospitals in planning for and managing pediatric surge.

Kanter, R.K. and Moran, J.R.(2007). [Pediatric hospital and intensive care unit capacity in regional disasters: expanding capacity by altering standards of care](#). Pediatrics. 2007 Jan;119(1):94-100.

The authors examine the capacity of New York City hospitals to accommodate a large pediatric surge and find that while altering standards of care could help address the increase in demand, intensive care unit capacity would not be sufficient in the event of larger-scale disasters.

Minnesota Department of Health. (2013). [Minnesota Pediatric Surge Primer and Template Plan](#). St. Paul, MN: Minnesota Department of Public Health.

This primer provides planning guidance for healthcare facilities that do not typically provide pediatric inpatient or pediatric trauma services. The website provides links to additional pediatric surge resources.

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.

Sills, M., Hall, M., Fieldstone, E., Hain, P., Simon, H., Brogan, T., Fagbuyi, D., Mundorff, M., and Shah, S. (2011). [Inpatient Capacity at Children's Hospitals during Pandemic \(H1N1\) 2009 Outbreak, United States](#). *Emerg Infect Dis.* Sep 2011; 17(9): 1685–1691.

The authors examined data from 34 U.S. children's hospitals during the 2009 H1N1 pandemic and found that during the fall, occupancy was actually 6% lower than it was during the same period of the previous seasonal influenza period (95% and 101% respectively). Using this data, they built five models to project occupancy and better understand the impact a more virulent pandemic could have on a facility.

## **Pediatric**

Abraham, H. (2015). [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 emergency response plans. She also shares pediatric-specific care tips for decontamination, triage, airway, drug dosage and delivery, and psychological care.

American Academy of Pediatrics. (2009). [Joint Policy Statement—Guidelines for Care of Children in the Emergency Department](#).

The American Academy of Pediatrics released this policy statement to highlight the resources necessary for hospital emergency departments (ED) to care for pediatric patients. Included are guidelines for: administration and coordination of the ED for the care of children, the necessary skills for those who staff the ED, quality and performance improvement, improving pediatric patient safety in the ED, policies, procedures, and protocols for the ED, ED support services, and equipment, supplies, and medications for caring for pediatric patients.

Center for Pediatric Emergency Medicine for New York City and New York Department of Health and Mental Hygiene Healthcare Emergency Preparedness Program. (2008). [Pediatric Tabletop Exercise Toolkit for Hospitals](#).

This toolkit includes customizable exercise materials (e.g., PowerPoint slides, moderator notes, participant handouts, etc.) and step-by-step process for planning and conducting a tabletop exercise with Emergency Department/ Clinical representatives and Incident Command/ Administrative representatives.

Christian, M., Toltzis, P., Kanter, R., et al. (2011). [Treatment and Triage Recommendations for Pediatric Emergency Mass Critical Care](#). (Abstract Only.) *Pediatric Critical Care Medicine*. 12(6 Suppl):S109-19.

The authors discuss issues related to developing triage algorithms and protocols, and the allocation of scarce resources, during pediatric emergency mass critical care.

Illinois Emergency Medical Services for Children, Illinois Department of Public Health, and Loyola University Medical Center. (2012). [Hospital Pediatric Preparedness Checklist](#).

This checklist can help hospitals determine their level of pediatric preparedness and identify opportunities for improvement. It can be saved and customized or used in its current form.

Institute of Medicine. (2014). [Preparedness, Response, and Recovery Considerations for Children and Families - Workshop Summary](#).

In June 2013, the Institute of Medicine Forum on Medical and Public Health Preparedness for Catastrophic Events convened a workshop to review existing tools and frameworks that can be modified to include children's needs, and highlight best practices in resilience and recovery strategies for children. This report summarizes the presentations and discussions to include: leveraging healthcare coalitions; provider, hospital, insurer, and health system perspectives on funding; mental and behavioral health recovery.

King County Healthcare Coalition Pediatric Triage Task Force, Public Health- Seattle & King County. (2010). [Hospital Guidelines for Management of Pediatric Patients in Disasters](#).

Toolkit for hospitals in the Seattle-King County region adapted from the New York City Department of Health and Mental Hygiene, "Children in Disasters: Hospital Guidelines for Pediatric Preparedness" (2008). This toolkit includes considerations for staffing and training, resources, security, transportation, decontamination, hospital-based triage, and inpatient bed planning.

Minnesota Department of Health. (2013). [Pediatric Preparedness Primer and Template Plan](#).

This customizable plan 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.

Monteiro, S., Shannon, M., Sandora, T., and Chung, S. (2009). [Pediatric Aspects of Hospital Preparedness](#). *Clinical Pediatric Emergency Medicine*, 10(3): 216-228.

The authors describe the key pediatric considerations for inclusion into hospital-based emergency preparedness programs, particularly: hospital incident command system (HICS), surge capacity, decontamination, infection control, sheltering in place, and evacuation.

New York City Centers for Bioterrorism Preparedness Program Pediatric Task Force. (2008). [Children in Disasters: Hospital Guidelines for Pediatric Preparedness](#).

This document highlights the efforts of the New York City Centers for Bioterrorism Preparedness Planning to assist the Department of Health and Mental Hygiene in preparing local hospitals to serve the needs of pediatric patients. The authors noted "hospitals of concern" (those which had limited pediatric services) and focused the report on 13 areas related to disaster preparedness (e.g., decontamination of children, family information and support, staffing, and security).

New York City Pediatric Disaster Coalition. (Accessed 27 May 2015). [Pediatric Disaster Coalition PICU Surge Template Plan](#).

A customizable Pediatric Intensive Care Unit Surge Plan template that focuses on increasing surge capacity and capabilities for the PICU, Pediatric Inpatient Unit, other inpatient units, and the Emergency Department.

New York City Pediatric Disaster Coalition. (Accessed 27 May 2015). [Pediatric Disaster Coalition Template NICU Surge Plan](#).

A customizable Neonatal Critical Care Surge Capacity Plan template that focuses on increasing surge capacity and capabilities for the neonatal intensive care unit (NICU).

U.S. Department of Health and Human Services, Administration for Children and Families. (2010). [National Commission on Children and Disasters: 2010 Report to the President and Congress](#)

This report includes the findings and recommendations from the Commission's examination and assessment of the preparedness, response, and recovery needs of children from all hazards. It includes 32 recommendations in areas such as disaster management, mental health, emergency medical services and pediatric transport, sheltering, and evacuation. Appendix B of the report includes an index organized by the agency, group, or individual charged with implementing the recommendations.