Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Policies



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OVERVIEW

The pediatric population represents a particular challenge in disaster preparedness and planning. Children have unique and often complex physiological, psychosocial, and psychological needs that differ from adults and are often magnified during a disaster (National Commission on Children and Disasters, 2010), and unfortunately children are frequently involved when a disaster occurs. As a result, it is essential that hospital disaster policies include and plan for this distinctive and vulnerable population.

In 2014, in response to the National Pediatric Readiness Assessment finding that only 46.8% of emergency departments reported having disaster plans that addressed children (Gausche-Hill et al., 2015), a workgroup of pediatric disaster preparedness experts drafted the Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Preparedness Policies to help ensure that pediatric considerations were included in hospital disaster planning. The checklist was divided into 10 specific domains and recommended the personnel, resources, equipment, and supplies that would be useful for rapid onset pediatric surge planning and disaster response.

In 2020, the Emergency Medical Services for Children (EMSC) Innovation and Improvement Center (EIIC) sought to evaluate and modernize the checklist. To accomplish this, a diverse workgroup of national experts in pediatric disaster preparedness—including many of the original authors— was convened to assess the original checklist and incorporate new pediatric disaster recommendations.

This Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Preparedness Policies is an update to the original 2014 checklist and seeks to expand its utility. It is intended as a tool to help hospital administrators and leadership incorporate essential pediatric considerations into existing hospital disaster policies.

What it is designed to do: This tool was designed to complement and augment existing disaster resources, both pediatric-specific and general, rather than to serve solely as a stand-alone document. The relative importance assigned to any given consideration is unique to each facility based on their specific risk assessments. What it is not designed to do: This is not a step-by-step guide to implementing policies. Instead, resources are provided for each domain to provide more details and help implement the considerations.

NEW DOMAIN

In addition to evaluating and updating the ten domains of the original version of the checklist, an additional domain was included in this update: Evacuation. Given many hospitals have limited long-term pediatric capabilities, planning for the safe and effective evacuation of pediatric patients is an important aspect of pediatric disaster response. The inclusion of this domain allows hospitals to anticipate and prepare for such scenarios and emphasizes establishing partnerships with regional healthcare facilities.

PROGRESSIVE CATEGORIES OF RECOMMENDATIONS: A KEY MODIFICATION

For each domain in this document, considerations are organized into a three-category progressive system: Foundation, Intermediate and Advanced. It is intended that institutions start by focusing on the more fundamental activities in the Foundation column initially, then move to the other columns as their level of planning increases. The considerations in each category are meant to build on the capabilities and preparedness of the prior category. The goal is to enable the tailoring of recommendations based on approximate hospital pediatric volume and inpatient pediatric capabilities and capacity.

Foundation: These are the basic building blocks of pediatric disaster preparedness that every hospital should be prepared to provide. Hospitals without dedicated pediatric inpatient services will likely focus primarily on this column, though they may take on planning activities from other columns depending on their resources and level of engagement. They are meant as the foundational disaster preparedness considerations necessary to meet the needs of children.

Intermediate: Hospitals with inpatient pediatric services may need to build upon foundation-level planning activities to provide higher levels of support and expertise for pediatric disaster patients. These considerations may require establishing partnerships with pediatric tertiary care centers in your region.

Advanced: In addition to completing foundation and intermediate-level planning activities, specialty children's hospitals, and comprehensive pediatric inpatients services within general hospitals, will often have the resources to provide a higher level of preparedness in their hospital as well as providing support and leadership within the region and state. Therefore, in addition to strengthening an individual institution's disaster response, these recommendations promote assuming a leadership role in the community.





IMPLEMENTATION

Pediatric domains and considerations in this checklist are intended to be integrated into existing all-hazards healthcare systems disaster preparedness policies or guidelines.. For example, this checklist can be used to supplement the eight healthcare preparedness capabilities addressed by healthcare coalitions funded by the Hospital Preparedness Program (http://www.phe.gov/Preparedness/planning/hpp/reports/Documents/ capabilities.pdf). Furthermore, hospital disaster plans are unique to each facility and community; hence hospital administrators and managers are encouraged to work closely with their local, regional, and state healthcare systems and healthcare and/or disaster coalitions, national disaster partners, and their corresponding local chapters to adapt recommendations to their local needs, strategies, and resource availability. References to specific resources are included at the end of the document to assist users in finding relevant literature and best practices. Additionally, a comprehensive compendium of pediatric disaster resources and searchable databases is now available from the National Library of Medicine Disaster Information Management Research Center's Health Resources About Children in Disaster and Emergencies at http://disaster.nlm.nih.gov/ dimrc/children.html.

QUESTIONS & FEEDBACK

Questions about or feedback on this checklist are greatly appreciated. To provide us your comments, please complete the online feedback form at https://form.jotform.com/42574809725161.

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DOMAIN 1: PEDIATRIC DISASTER CARE COORDINATION

A pediatric disaster champion is a designated staff member(s) who champions high-quality pediatric disaster care and response. Establishing this position is a crucial first step in improving and strengthening an institution's pediatric disaster capabilities.

	FOUNDATION	INTERMEDIATE	ADVANCED
Identify Key Staff	O Identify a staff member to champion pediatric disaster care. This person may serve in the role of the pediatric emergency care coordinator (PECC), also known as a pediatric champion.	 O Designate a staff member to serve as the Pediatric Disaster Care Coordinator. O Staff member(s) have training in disaster response/emergency management or are willing to learn about disaster response/emergency management. 	O Identify and engage other hospital professionals who can provide specific expertise and advocate for the integration of the needs of children in planning and implementing pediatric disaster response (e.g., emergency management, neurosurgeon, trauma surgeon, infectious disease/infection control, emergency medicine physicians).
Responsibilities of Key Staff	 O Staff members are identified and supported by hospital administration with a formal position or designation. O Staff members have official roles and designations on hospital committees (e.g., medical, trauma, emergency management, etc.) to serve as liaison for pediatric patients. 	 O Coordinate department and hospital- wide pediatric-inclusive disaster drills. O Facilitate disaster-related learning activities (e.g., FEMA, ICS courses, lectures, table-top activities) that include pediatric considerations and priorities for all staff. 	 O Collaborate with hospital emergency management and are engaged in developing and reviewing hospital disaster policies, ensuring that pediatric needs are addressed. O Staff members serve as a liaison to EMS agencies and facilitate disaster- related learning that includes pediatric considerations. O Staff members promote pediatric disaster awareness within the community.



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DOMAIN 2: REGIONAL COALITION BUILDING

Developing and strengthening both internal and external coalition partnerships aids in disaster response and allows an institution to quickly and effectively ramp up their capabilities.

	FOUNDATION	INTERMEDIATE	ADVANCED
Coalition Building-Internal	 O Identify service lines throughout the hospital to participate in planning and expand resources and scope in pediatric disaster response: Medical services: surgery, anesthesia, critical care, emergency department, OB/GYN. Support services: nursing, respiratory therapy, pharmacy, blood bank, radiology, central supply, environmental services, communications/media. O Conduct internal drills or exercises that include pediatric patients (**inclusive of all developmental stages). 	 O Conduct internal drills or exercises that engage the various service lines/ departments to test-out plans and protocols; include pediatric patients and pediatric specific considerations. O Engage additional in-hospital or health care system services to expand input into planning and enhance consideration of pediatric needs: social services mental health child life specialists hospitalists 	 O Develop plans specific to each service line that identify and address pediatric considerations. O Engage community stakeholders to further enhance planning and exercise involvement and support pediatric care and families. (Primary care physicians, family practice physicians, urgent care personnel, faith-based representatives, pediatric-centered medical homes, EMS professionals, school personnel, child care professionals, Red Cross staff, community business leaders, etc.)
Coalition Building-External	 O Develop relationships with key state and regional partners to aid in pediatric disaster response such as: EMS Agencies / Fire Departments State Emergency Management Agency Local health care or disaster coalition EMSC State Partnership program Public health authorities Department of Public Health liaison Trauma Programs Burn Programs Children services, foster parent associations Law Enforcement Local schools Regional Hospital Association 	O Actively participate in state-wide and regional coalition activities and/or drills that focus on pediatrics or include pediatric considerations.	 O Connect with the medical specialty societies/associations regarding their roles in disasters. O Assume a leadership role and/or establish a state-wide or regional pediatric disaster coalitions. O Advocate for inclusion of key pediatric considerations in disaster preparedness with state-wide and regional partners.



DOMAIN 2: REGIONAL COALITION BUILDING (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Surge Capacity & Capability Process/plan to develop measures, prioritize, and expand pediatric surge capacity and capabilities based on resource availability.	 O Evaluate current institutional disaster capabilities including pediatric specific capabilities: initial assessment/stabilization radiology/imaging, laboratory, and ancillary services capabilities inpatient, ICU, and surgical capabilities Identify potential deficiencies or areas for coalition support. O Uutline the crisis standards of care for your institution in collaboration with your region. 	 O Engage with state-wide or regional coalition members to evaluate local surge capacity. O Identify areas for expanded surge capacity within your institution and as part of the state-wide or regional coalition. This might include using approaches used in other states (OH, NY, CA, others) where an assessment of beds and assets was conducted, and a plan as to where children with certain injuries would be transported to (fractures, burns, agent exposure, minor lacerations, etc.). 	 O Assume a leadership role in regional planning for expanded pediatric-specific surge capabilities. O Advocate with the appropriate governmental entities to formally establish crisis standards of care.
Interfacility Transfer	 Identify institutional Memorandums of Understanding with pediatric tertiary/ quaternary hospitals or other regional hospitals that accept pediatric patients. Identify transfer agencies that are willing to transport pediatric and/or neonatal patients. Utilize essential elements of information for patient transfers. Identify and integrate with statewide or regional coordinating centers that assist with patient transports. Consider times when pediatric patients might need to be seen at adult care facilities (and vice-versa) and discuss/ plan accordingly with hospitals in the area. 	 Generate a list of common pediatric diagnoses and/or scenarios that routinely warrant an inter-facility transfer. Coordinate with a regional coalition to provide direction/oversight of transfers within the region (esp. to alt. destinations aside from a pediatric center. Establish specific pediatric transfer protocols that include: Agreements and guidelines to facilitate movement of children needing pediatric specialty care. Guidelines for bi-directional transfer of pediatric patients in order to increase surge capacity at participating institutions. How to address parental presence in a pandemic or otherwise. Evacuation of areas within hospitals that care for pediatric patients with special attention paid to equipment and training needed for vertical transport. 	 O Establish a group of stakeholders to develop an inter-facility transfer plan that addresses the following components: Defined process for initiation of transfer, including identifying appropriate receiving center and the roles/responsibilities for referring and receiving centers. Process for selecting an appropriately staffed transport service for the patient's needs. Plan for obtaining informed consent and transferring important material (informed consent, medical records, personal belongings). Plan for providing patients and families with information regarding the transfe.r Incorporate orientation/education of staff who are new or need training.



DOMAIN 2: REGIONAL COALITION BUILDING (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Telemedicine	 O Determine telehealth/teleconsult capability and policies within your institution. O Identify regional coalition partners with telemedicine capabilities. O Ensure adequate support for telehealth/ teleconsult capability (legal, financial). 	 O Integrate telemedicine policies and practices into daily workflow. O Routinely test telemedicine policies and practices in drills/exercises. 	 Identify specific resources (staff, space, equipment) dedicated to telemedicine capability and capacity in a disaster. Establish a telemedicine protocol to leverage your institution's pediatric expertise within the regional coalition. Incorporate telemedicine capabilities into regional prehospital and EMS protocols.



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DOMAIN 3: PEDIATRIC SURGE CAPACITY

Evaluating an institution's current surge capacity to identify weaknesses and develop strategies to address all aspects of surge capacity allows institutions to effectively prepare for current capacity and be better prepared for an unexpected high number of pediatric patients.

	FOUNDATION	INTERMEDIATE	ADVANCED
General Surge Planning	 O Identify and continue to augment baseline pediatric capabilities: Emergency department capacity Surgical capacity Extended care for up to 48-72 hours when immediate transfer is not available. O Establish a protocol to triage pediatric patients and determine which require priority transfer. O Establish a plan for accessing pediatric expertise at the community and regional level (e.g., telemedicine, phone consultation) O Consider establishing a formal relationship with local pediatricians. 	 O Establish a plan for caring for sick/ more complex pediatric patients as part of a surge especially when immediate transfer is not available. O Determine ability to augment capacity of pediatric services within the hospital Surge targets of 120%, 200%, 300% under conventional/contingency/crisis models Consider how to both expand pediatric capacity/capability and convert adult services to pediatric use 	 C Lead coordination efforts across the region regarding pediatric patient transfers to regional pediatric centers. Special considerations: burn, pediatric critical care (advanced respiratory and blood pressure support) C Establish a plan for how to provide pediatric expertise within the community (e.g., telemedicine, phone consultation) C Ensure pediatric considerations are included in regional crisis care guidelines and support regional transfer coordination for children with different/ complex needs (e.g., pediatric specific transport)
Surgical Capabilities	 O Identify surgeons within your institution who already care for pediatric patients or are prepared to provide care in a disaster situation. O Identify surgical conditions in children for which the hospital could potentially provide care. 	 O Identify immediate access to a pediatric surgeon. O Identify capabilities in pediatric surgical subspecialities (orthopedics, neurosurgery, ORL). 	O Immediate access to pediatric surgical subspecialities regardless of trauma designation (orthopedics, neurosurgery, ORL).
Space	 O Identify institutional capacity at which alternative care sites are necessary. O Identify alternative spaces within the institution (e.g., cafeteria, pre-op clinic) that can be used for pediatric care in a surge and establish a plan for when and how to utilize those spaces. Older children may need to be kept at community facilities pending availability. O Ensure those spaces are private, child-proof, secure, and protected from the public. 	O Determine how existing pediatric spaces can be expanded and how adult care areas can be converted to meet pediatric surge needs.	 O Establish a plan to identify and create immediate bed availability for pediatric surge. O Prioritize ICU availability for transfers. Expand ICU services using existing space.



DOMAIN 3: PEDIATRIC SURGE CAPACITY (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Equipment & Supplies	 C Ensure institution has adequate pediatric-sized equipment, dietary supplies, diapers, and medications to manage pediatric patients O Investigate ability to utilize non-pediatric equipment, supplies and medications for pediatric use and develop institutional guidelines to do so. O Engage with supply chain management and sterile processing staff to ensure enough supply to meet needs for prolonged patient stays in your facility when transfer is not immediately possible (e.g., shelter in place) 	O Engage with supply chain management staff to track usage of pediatric supplies and medications.	 O Create pediatric supply carts and/or kits that can easily be deployed to areas in need. O Establish plans to secure sufficient quantities of key equipment to meet surge targets (e.g., pediatric-capable ventilators) through vendor agreements, MOUs with adjacent pediatric centers as well as local and federal government agencies.
Staff	 O Develop a process to bring in additional staff including emergency credentialing, verification, and background checking. O Ensure current staff is trained in pediatric disaster response, including surge capabilities. O Develop plans to most efficiently utilize new staff, including staff to secure expanded care areas, oversight of unattended minors, family reunification. O Consider utilizing adult care takers and locations especially for older children 	 O Develop an institution-wide emergency notification system to mobilize current staff during a surge. O Identify and create formal relationships with additional staff that can help meet pediatric needs from within the hospital (e.g., nursing, physician, respiratory therapy, pharmacy) within the community (e.g., family medicine, school nurses, local EMS, medical reserve corps) 	 C Leverage staff expertise to increase to surge targets (e.g., tiered staffing models) C Consider Memorandum of Understanding (MOU) or other agreements to support adjacent regional pediatric centers (e.g., telemedicine, phone consultation, Disaster Medical Assistance Teams). C Establish a mission control center to coordinate response and provide leadership to regional healthcare centers. C Consider how critical care transport teams and other key hospital functional areas can provide mutual support.



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DOMAIN 4: TRIAGE, INFECTION CONTROL, AND DECONTAMINATION

Preparing for the initial stages of a disaster response including triaging and decontamination is essential in an effective disaster response and there are several necessary considerations unique to the pediatric population.

	FOUNDATION	INTERMEDIATE	ADVANCED
Pediatric infectious disease, chemical or biological exposure suspected	 O Identify a separate triage area and entrance away from other ED patients for both infectious and/or chemical exposure concerns. O Ensure adequate PPE (gown, gloves, mask (including N95 for airborne or PAPR)) is easily available to staff. O Establish a relationship with a regional pediatric center and/or pediatric infectious disease specialist for consultation as needed ahead of time. 	 O Establish an isolation area for infectious disease exposures/concerns (ideally negative pressure areas for all airborne disease: measles, TB, SARS, MERS, COVID, Ebola) O Enforce a Limited Visitor Policy, allowing for one parent/guardian with a child. O If a negative pressure room is not available, identify a space with doors that will remain closed. O Secure pediatric PPE including disposable pediatric-sized face masks. 	 O Set up appropriate PPE donning/doffing stations outside of all rooms O Establish washing/shower areas in or next to isolation rooms
Decontamination	 O Establish a basic contamination process if no decontamination area is available: Disrobe patient Wipe down skin Irrigate eyes Provide clean patient gowns/blankets O Keep families together when possible and allow parents to wash children. O Be mindful that children are at risk of hypothermia and have towels/dry clothes ready for children. 	 O Establish a dedicated decontamination area with specific pediatric considerations. O Ensure staff is available to direct patients to the decontamination area. O Develop a plan to move small/immobile children through showers as they are a fall risk. Do not hold child. Consider using a laundry basket/bassinet/other safe way of moving a child through the shower. O Aim for a 3-6 minute shower with a water temperature of between 98-1100F (to avoid hypothermia) and max water pressure of 60 psi (to avoid damage to skin). 	 O Protect modesty when possible, including separating sexes other than family members with curtains. O Provide same-sex staff member to help when family not available O Provide modesty covers to patients immediately after showering
Process for disinfection of communally available toys in the facility	O Wipe down all toys and shared objects with bleach wipes or disinfectant wipes after every use regardless of patient chief complaint		



DOMAIN 4 RESOURCES

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- 7. US Department of Health and Human Services, & Chemical Hazards Emergency Medical Management. (2021). JumpSTART Pediatric Triage Algorithm CHEMM. Retrieved from https://chemm.hhs.gov/startpediatric.htm
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DOMAIN 5: EVACUATION

Given many institutions have limited long-term pediatric capabilities, planning for the safe and effective evaculation of pediatric patients, from the foundational through the advanced care levels, is an important aspect of pediatric disaster response.

	FOUNDATION	INTERMEDIATE	ADVANCED
Plan	 O Identify both facility-wide and/or unitbased triggers or metrics to indicate need for evacuation of patients, ensuring there is regional knowledge of pediatric bed space and interfacility transfer guidelines O Formalize agreements with regional pediatric centers regarding reception of pediatric patients O Identify internal locations that could serve as back-up units for unit-specific evacuations. O Develop a pediatric specific transportation strategy in conjunction with local and/or regional hospital, Public Health, and EMS representatives 	 O Develop a plan to evacuate specialized pediatric patients including those that are unaccompanied. O Develop a plan to evacuate children with special equipment and behavioral needs. This includes long term care facilities with pediatric patients O Develop a system to track equipment and/or staff that have left the hospital. 	 C Lead regional evacuation planning in coordination with local healthcare facilities, governmental and federal agencies. O Develop plans to assist in evacuation of non-pediatric centers and absorb those evacuated from other centers. O Develop plan to evacuate higher level of care and specialized patients to closest pediatric centers (e.g., NICU, intubated patients, children with special care needs, ECMO, etc.). Consider emulating the process for burn centers. O Create mobilized teams of providers to be dispatched to lead from the field and assist in evacuation.
Supplies	O Identify materials needed for evacuation of entire hospital as well as specialized materials for specific units (e.g., bassinets, newborn apron).	O Ensure appropriate material needed for pediatric transport including transporting specialized pediatric patients (e.g., ventilator-dependent) and ensure appropriate pediatric-trained staff are available for evacuation, if needed.	 O Ensure adequate pediatric-specific evacuation equipment is available at your facility O Help supply pediatric-specific evacuation equipment to regional hospitals.
Drills/Education For more information on pediatric drills, see Doman 10: Exercises, Drills & Training	 O Train staff on location and use of pediatric-specific evacuation equipment. O Incorporate unit-specific evacuation drills into preexisting exercises. 	O Include evacuation of specialized pediatric patients (high acuity, etc.) into disaster drills.	 C Lead regional disaster drills that include pediatric evacuation capabilities that test both receiving patients and evacuating your facility to other centers. C Develop just-in-time training on the use of pediatric-specific evacuation equipment that can be used by both your facility and others within your region.



DOMAIN 5: EVACUATION (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Transport services For more information on pediatric interfacility transfer, See Domain 2 - Regional Coalition Building	O Utilize a systematic approach to identify pediatric transport needs (e.g., TRAIN® matrix).	O Create a transport team that can assist in regional evacuation efforts with specific training and capability to transport pediatric patients (ALS crew, Critical Care Transport, etc.)	 C Create or enhance your institution's regional transport services especially with consideration to specialized pediatric patients (e.g., critical care, ECMO, etc.) D Develop a strategy to leverage your pediatric critical care transport resources/expertise to augment regional transport services (e.g., embedding a critical care transport nurse from your facility into another agency's ambulance/ helicopter). Lead efforts to coordinate the activities of regional transport capabilities together with the appropriate regional authorities Engage other regional authorities (e.g., air transport) for assistance in transporting patients from your center.

DOMAIN 5 RESOURCES

- 1. Child Life Disaster Relief. (2021). Retrieved from https://cldisasterrelief.org/
- Federal Emergency Management Agency (FEMA). (2009). Evacuating the Special Needs Population. Retrieved from https://training.fema.gov/programs/emischool/el361toolkit/assets/evacuatingspecialneedspopulation.pdf
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- 4. Marcin, J. P., & Pollack, M. M. (2002). Triage scoring systems, severity of illness measures, and mortality predictionmodels in pediatric trauma. Crit Care Med, 30(11 Suppl), S457-467. doi:10.1097/00003246-200211001-00011.



DOMAIN 6: PEDIATRIC PATIENT TRACKING & FAMILY REUNIFICATION

Unique to pediatric disaster response is preparing for the arrival of unaccompanied minors, developing family tracking and reunification policies, and considering special security situations.

	FOUNDATION	INTERMEDIATE	ADVANCED
Pediatric Identification/Tracking	 Create a process to track an unaccompanied child who presents to the emergency department. Create a child identification form listing information available from verbal children (name, age, parent name, address/phone, pediatrician's name, school/school teacher's name, allergies) and identifying characteristics and intake source (where did they arrive from and who brought them in) of children. Take pictures of children attach to the medical record Consider best practices to identify unaccompanied children 	 O Create a process to track multiple unaccompanied children; consider incorporating a process into electronic health records. O Create processes defining how unaccompanied children will be definitively identified especially if unable to identify self. O Engage with regional partners such as the American Red Cross or the National Center for Missing and Exploited Children to develop a uniform pediatric identification/tracking process. 	O Create a transfer/tracking tool with capacity to record children's photos/ID information. This should include digital camera and photo printing capabilities. Ensure there is a process or guideline on the use of photos.



DOMAIN 6: PEDIATRIC PATIENT TRACKING & FAMILY REUNIFICATION (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Family Reunification Planning	 O Develop a comprehensive internal planning team to understand hospital family reunification capabilities and conduct a needs assessment of local community partners (including social work, pediatricians, emergency management, and child life if available). O Engage adjunct hospital departments (Public Relations, Risk Management, Chaplaincy, Food Services) for planning purposes. O Develop procedures to recommend appropriate social media usage by staff, families, and patients (e.g., only the PR or communications/media staff will post official updates - staff are to refrain from personal posts during an incident). Also, assign staff to monitor local social media (including local social media such as the city's community chatter page) in case there is new information being shared or incorrect info posted that should be corrected. 	 O Describe family reunification plan's leadership and organization of staff, including descriptions of how the plan's elements fit into the hospital's overall emergency operations plan and HICS O Develop procedures to establish and operate a Hospital Family Reunification Center, Pediatric Safe Area, and Family Reunification Following Disasters: A Planning Tool for Health Care Facilities for a description of these areas. O Create a family intake form that can be used to compare answers to questions given by unaccompanied children (such as: parents' names, siblings names, pets names, city they live in, school/teacher's name, pediatrician's name, names of friends or neighbors or relatives) to information provided by adults claiming to be guardians when other means of verification are unavailable. O Include family reunification in hospital drill or tabletop exercise. 	 O Develop procedures with external stakeholders that govern the sharing of relevant information with other hospitals, public health agencies, and other partners involved in the response, as legally permitted, to facilitate family reunification O Consider leading regional family reunification drills and/or tabletop exercises to test plans, plan components, or response by certain areas within the hospital or community. O Offer to serve as a resource for other hospitals to augment their plans.
Space	 O Identify areas in the hospital that can serve as: Secure private location for Pediatric Safe Area (PSA) for unaccompanied children. Hospital Family Reunification Center (HFRC). Family Reunification Site (FRS). This process may occur at the hospital or—for medically cleared children—at a community site with others than can assist with reunification (law enforcement, educators) Please see Family Reunification Following Disasters: A Planning Tool for Health Care Facilities for a description of these areas. 	 O Pediatric Safe Area, Family Reunification Site and Hospital Family Reunification Center should be in separate areas in the hospital. O Consider Hospital Family Reunification Center site with a waiting area and small rooms for private conversations. 	 Consider having Pediatric Safe Area consistent with separate, contiguous areas for different age groups or children with sensory integration issues. Establish medical oversight in the Pediatric Safe Area. Determine if a notification center is needed which would be a private area where adults can receive medical information or death notification.



DOMAIN 6: PEDIATRIC PATIENT TRACKING & FAMILY REUNIFICATION (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Staff	 O Ensure availability of security for Pediatric Safe Area, Hospital Family Reunification Center and Family Reunification Site. O Define staffing plan for Pediatric Safe Area, Hospital Family Reunification Center, and Family Reunification Site that utilizes either hospital staff, community partners or a combination of both. (These areas may be combined if sufficient staff is not available for all three areas). O Ensure adequate medical oversight for children that might decompensate. 	O Consider appropriate staffing ratios for younger children in Pediatric Safe Area; utilize security staff to ensure children do not wander into other areas of the hospital.	O Consider developing a family reunification team—consisting of both hospital personnel and community partners—that could provide assistance to impacted hospitals in your region.

DOMAIN 6 RESOURCES

- 1. AAP Disaster Preparedness Advisory Council, Reunification Subcommittee. (2018). Family Reunification Following Disasters: A Planning Tool for Health Care Facilities. Retrieved from https://downloads.aap.org/AAP/PDF/AAP%20Reunification%20Toolkit.pdf
- 2. Federal Emegency Management Agency (FEMA) Ready Campaign. (2013). Post-Disaster Reunification of Children: A Nationwide Approach. Retrieved from https://www.ready.gov/sites/default/files/2019-06/post_disaster_reunification_of_children.pdf
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DOMAIN 7: LEGAL AND ETHICAL CONSIDERATION

The pediatric population requires special legal and ethical planning and policy implementation.

	FOUNDATION	INTERMEDIATE	ADVANCED
State Emergency Authority/Orders	O Process for Emergency Management and Hospital Counsel to alert leaders to Federal and State Emergency declarations, orders, regulatory waivers, and legislative developments.	O Participation in Regional Healthcare Coalition (HCC), which will have pediatric champions as resources.	O Provide pediatric expertise to regional HCC pediatric committee participation) or state emergency planning bodies.
Emergency Operation Plan(s) (EOPs)	 O Emergency Operations Plan (EOP includes at minimum all hazards required by CMS/TJC/Federal and State Law. O Duty to Plan for the arrival of pediatric patients in All Hazards EOP 	O EOP includes pediatric champion in place (see below).	O EOP includes robust planning for specialty patients in disasters; potential need to assume regional responsibility for certain capabilities (examples include ECMO expertise; special containment units), including pediatric specialty care. Must consider legal options and consequences related to acceptance or declination of transfers related to EMTALA or similar state-based laws and policies.
Policies and education regarding assent/consent	O EOP includes communication to first responders and receivers about basic exemptions from consent during life or limb-threatening conditions.	O Incorporation of Domain 5 Reunification processes into EOP.	O Legal/ethics experts and child protection team available to create plans for social support of unaccompanied children with no consenting guardian



DOMAIN 7: LEGAL AND ETHICAL CONSIDERATION (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Credentialing, Privileging and Liability Protections	O EOP for emergency credentialing and privileging of volunteers and medical staff services includes plan to redeploy privileged providers to expanded scope	 O Ongoing regional healthcare coalition participation in planning for surge (especially pediatric) with strategic education and preparation of key staff such as ED, Family Medicine, Primary Pediatrician providers in region for potential deployment in local or regional pediatric surge O Education for Medical Staff Services and Risk Management around immunity from liability for workers, volunteers, and any licensed health care personnel practicing under expanded scope during emergency/disaster. 	 O Plan for pediatric expertise redeployment: in person, teleconsultation options regionally and statewide O Understand the state's pediatric care coordination capabilities and participate in creating pediatric surge plans for the state, including pediatric teams for deployment, addition of pediatric expertise to state or federal volunteer rosters (Medical Reserve Corp, etc.)
Crisis Standards of Care (CSC) and Scarce Resource Allocation Committees (SRAC)	O EOP includes a discussion on the creation of a CSC plan for disaster triage/intake.	 O EOP includes CSC planning with specific resources from regional coalition or state to shelter in place with children until safe transfer can be achieved (focused pediatric surge planning) O Create regional partnerships for consultation (or telehealth) with pediatric centers to coordinate transfers to avoid crisis standards. 	 O Creation of pediatric CSC aligned with national, state recommendations and drills O Pediatric CSC, legal and ethics experts in specialty centers should be Disaster Ethics/SRAC and should review and inform regional or state guidance.
Emergency Medical Treatment and Active Labor Act (EMTALA) and other federal or state laws impacted by disasters	O EMTALA – understand baseline principles when waivers are allowable, including which elements are modifiable in a declared disaster.	O EMTALA – establish partnerships with pediatric centers outside of normal referral patterns through participation in regional or state healthcare coalition planning for pediatric surge (for alternate referral or consultation arrangements that may be disrupted by EMTALA waiver)	O Advanced planning for regional sharing of resources and consultation with regional centers to shelter in place or assist in finding other accepting centers when receiving facility have reached maximum capacity.



DOMAIN 7 RESOURCES

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DOMAIN 8: BEHAVIORIAL HEALTH

Behavioral health is a critical component to pediatric care, especially in a disaster environment. Developing and implementing a multidisciplinary approach to pediatric behavioral health is a vital aspect of disaster response.

	FOUNDATION	INTERMEDIATE	ADVANCED
 Psychological first aid (PFA) training *This involves psychoeducation related to common adjustment reactions to crisis in children, risk factors for adjustment difficulties, and practical strategies for providing support *Goal is to enable professionals to conduct basic screenings and/or to determine the difference between a typical reaction to a crisis event vs a situation where a child needs ongoing monitoring, counseling, or mental health services. 	 O Ensure PFA training is provided to all staff and optional training on its unique application to children is readily available. O PFA educational material is readily accessible online through hospital network and/or disseminated to staff. 	 O Provide pediatric-specific PFA training to key clinical staff with likelihood of interacting with children and families. O Establish protocols to identify specific staff qualified to conduct screening and support during a disaster scenario. 	 O Provide pediatric-specific PFA training to all hospital staff. O Disseminate best practices regarding pediatric specific PFA to coalition hospitals and lead regional-wide education efforts.
Pediatric-specific Psychoeducational Materials	O Create or acquire pediatric-specific psychoeducational materials and make them available and easily accessible to clinical staff for use in a disaster scenario.	 O Material is readily available to clinical staff at time of crisis and is customized to include local mental health resources in the region O Ensure materials are available in all languages used by a significant portion of the population. 	O Material is routinely distributed in print and/or electronic format to impacted families (e.g., those impacted by natural disaster and/or trauma, etc.)
Behavioral health professionals (e.g., psychiatry, psychology, developmental- behavioral pediatrics, child life, advanced practice nurses with behavioral health expertise, social work, etc.)	O Identify referral resources in the community for children experiencing trauma (e.g., behavioral health specialists with expertise in trauma treatment of children) and/or loss (e.g., children's bereavement centers/camps or hospice programs).	O Establish MOUs with qualified behavioral health professionals or create protocols for behavioral health professionals to be available on-call to provide services on- site during disasters.	 Qualified behavioral health professionals are members of hospital staff and provide coverage 24/7/365 with ability to surge during a disaster. Establish protocols to provide pediatric behavioral health tele-health capabilities to coalition facilities in a disaster.



DOMAIN 8: BEHAVIORIAL HEALTH (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Pediatric mental health evaluation and triage capabilities	 O Provide basic pediatric screening training to all triage staff. O Establish protocols to secure qualified behavioral health staff availability to assist in assessment of behavioral health needs and screening in a disaster (e.g., by phone or telehealth consultation). O Identify referral sites for evaluation of children with behavioral health emergencies that do not require hospitalization. 	O Establish protocols to identify specific in-house staff trained and qualified to conduct pediatric-specific secondary behavioral health screening to identify when higher level or emergency behavioral health services are indicated	 C Create and disseminate educational materials to prepare all triage staff in the hospital to understand and conduct pediatric-specific secondary behavioral health screening to identify when higher level or emergency behavioral health services are indicated C Lead advocacy efforts to create and disseminate acute pediatric-specific mental health evaluation resources that are available to all regional healthcare facilities.
Death notification and bereavement support	 O Establish a process for providing clinical guidance on death notification for children and support for grieving children and families. O Ensure clinical staff are aware of resources and that they are readily available. 	O Establish processes for behavioral health professionals (e.g., social workers, religious services or community- based professionals) with expertise in death notification involving children to be available on-call to assist with notification and to provide acute and ongoing support to grieving children and families as well as community healthcare practitioners.	 O Behavioral health professionals are in house or readily available to support pediatric death notification and can provide ongoing support for grieving children who are hospitalized. O Ensure behavioral health professionals have expertise in evaluation and support for sub-populations of children (e.g., intellectual, and neurodevelopmental disabilities, pre-existing mental illness, etc.)
Policies and strategies to reduce unnecessary exposure to disaster-related sensitive stimuli	O Establish specific rooms/areas in the ED and inpatient units with ability to reduce exposure (e.g., curtains to reduce exposure to injured or upset patients and families)	O Ensure all rooms in ED are designed to meet these requirements.	O All patient care rooms in the hospital are so designed.



DOMAIN 8: BEHAVIORIAL HEALTH (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Professional self-care (While not unique to care of children, recognition that death of children, grieving children, and traumatized children can be particularly evocative for staff)	 O Ensure EAP (Employee Assistance Program) or other free and employer supported mechanisms that provide counseling support services are available and easily accessible for all staff. O Ensure healthcare providers that care exclusively for adults have just-in- time training and resources to counsel families in a disaster. 	O Provide training on professional self- care to all clinical staff, including explicit discussion of context of care during a crisis and caring for grieving and traumatized children.	 O Provide training on appropriate professional self-care to all professional staff O Create and disseminate educational materials on professional self-care in the setting of a pediatric disaster to regional healthcare facilities.



DOMAIN 8 RESOURCES

- American Academy Of Pediatrics Committee on Pediatric Emergency Medicine, American College Of Emergency Physicians Pediatric Emergency Medicine Committee, & Emergency Nurses Association Pediatric Committee. (2014). Death of a Child in the Emergency Department. Pediatrics, 134(1), 198-201. doi:10.1542/peds.2014-1245. Retrieved from https://publications.aap.org/pediatrics/article-pdf/134/1/198/1058329/peds_2014-1245.pdf
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DOMAIN 9: CHILDREN AND YOUTH WITH SPECIAL HEALTH CARE NEEDS

Children and youth with special health care needs is a unique consideration in pediatric disaster response and requires special attention when planning for a disaster.

	FOUNDATION	INTERMEDIATE	ADVANCED
Planning	 Identify content experts and partners skilled in caring for CYSHCN in your community (e.g., caretakers, community pediatricians, developmental-behavioral pediatricians, home health agencies, parent support organizations) Anticipate and incorporate the needs of CYSHCN in your community and plan for their initial care during a disaster (e.g., consider estimating the number of patients with specific needs to ensure they can be cared for in a disaster) 	 O Develop relationships with state and regional planning agencies to identify regional sheltering opportunities for CYSHCN. O Strategize with patients, families, Public Health and Public Safety officials to create a plan to keep CYSHCN who are dependent on water, power, or technology in your community from needing hospitalization to support their baseline needs during a disaster. O Collaborate with local advocacy groups and community partners to ensure that children with developmental disabilities or technology dependence are considered in all aspects of disaster preparedness including in emergency shelters. 	 Identify the hospitals closest to your institution's more fragile patients and create a coordinated plan for their care during a disaster scenario Disseminate best practices regarding preparedness for families of CYSHCN via their medical homes embedded in your institution (e.g., complex care clinic) Create a robust system for remote support of non-pediatric hospitals in the care of CYSHCN Lead advocacy efforts for state- and region-level planning to provide appropriate sheltering operations for CYSHCN during a disaster
Equipment, supplies and medications required	 Identify equipment, supply and medication needs (e.g., ventilators, suction, oxygen) for CYSHCN in your community that may be required in your hospital in the event of a crisis. Establish protocols with local EMS agencies to ensure CYSHCN are transported with all their medications and equipment (e.g., backup tracheostomy tubes, power cords for vents) Coordinate with local durable medical equipment companies to develop a process for securing essential equipment during a disaster 	O Develop plans to obtain specialized equipment (e.g., wheelchairs, pediatric -capable ventilators, pediatric feeding tubes, pediatric suction catheters, tracheostomy, portable source of electricity, etc.) or MOUs to meet the needs of CYSHCN in a prolonged disaster scenario.	O Develop strategies to distribute on- hand advanced pediatric resources and medical supplies to enable continued care of CYSHCN at regional centers.



DOMAIN 9 RESOURCES

- American Academy of Pediatrics, Committee on Pediatric Emergency Medicine, Council on Clinical Information and Technology, & American College of Emergency Physicians Pediatric Emergency Medicine Committee. (2010). Emergency Information Forms and Emergency Preparedness for Children With Special Health Care Needs. Pediatrics, 125(4), 829-837. doi:10.1542/peds.2010-0186. Retrieved from https://publications.aap.org/pediatrics/article-pdf/125/4/829/895276/zpe00410000829.pdf
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DOMAIN 10: EXERCISES, DRILLS, AND TRAINING

Routine disaster drills and training is crucial in maintaining disaster preparedness and it is important that pediatric considerations and scenarios are included in these exercises.

	FOUNDATION	INTERMEDIATE	ADVANCED
Exercises & Drills	 Implement annual institution-wide disaster training exercises, incorporating pediatric patients. Train staff on location and use of pediatric-specific evacuation equipment and conduct surge exercises with evacuation components Ensure transfer agreements and protocols have been established within the regional coalition and include communication between institutions in drills. 	 O Establish triage protocols and training to identify patients to be considered for immediate transfer (critically ill/injured OR those sufficiently stable to move to another care center). O Practice transferring patients with appropriate pediatric specific equipment and personnel. 	 O Establish a pediatric care-review process (Process Improvement, Quality Improvement, After Action Report, Corrective Action Plans, etc.) into disaster drills. O Lead regional disaster drills that include pediatric evacuation capabilities that test both receiving patients and evacuating your facility to other centers. O Incorporate lessons learned, after action reports, and improvement plans from exercises into future disaster planning.
Training	O Ensure disaster drills incorporate pediatric patients (especially infants and toddlers) in order to test the system's ability to handle a surge in or evacuation of a variety of pediatric patients (e.g., high acuity, infants, special needs).	 O Determine and plan for pediatric-specific staffing needs during a disaster scenario including: identification of pediatric-focused staff to champion pediatric disaster care staff predetermined to be appropriate to accompany unaccompanied minors. O Ensure disaster drills incorporate "just-in-time" training specific to pediatrics (e.g., review of pediatric triage, age-specific vital signs, unaccompanied minors) 	 O Develop curriculum and training opportunities that address gaps and increase skills specific to pediatric patients, ensure key staff access training at least annually. O Develop just-in-time training on the use of pediatric-specific evacuation equipment that can be used by both your facility and others within your region. O Utilize EMSC state manager for additional resources.



DOMAIN 10 RESOURCES

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DOMAIN 11: RECOVERY AND RESILIENCY

Anticipating and preparing for the needs of the community, and particularly children, after the acute phase of a disaster has concluded is vital. An effective disaster response includes supporting the community in recovery.

	FOUNDATION	INTERMEDIATE	ADVANCED
Discharge Planning	 C Ensure discharge processes include protocols if a child cannot self-identify as well as tracking protocols and tools to ensure that providers can readily communicate when and where children have been discharged or transferred. O If discharged to social services, ensure health communication of children is maintained. 	 O Collaborate with local agencies (e.g., state child welfare agency, Red Cross, police, social work, etc.) to ensure follow-up on all discharged patients. O Establish protocols to liaise with court appointed advocates. O Establish outreach processes with local primary care physicians and clinics to contact affected families and coordinate follow-up. 	 O Establish a formal follow-up process with other coalition facilities concerning outcomes/care of patients transferred to your facility. O Disseminate discharge planning processes to other facilities in coalition.
Mental Health	O Assess short- and long-term pediatric mental health needs for your community and anticipate additional needs in the event of a disaster.	 O Collaborate with mental health specialists including school therapists and telehealth mental health professionals to ensure acutely increased available access to mental health services in the event of a disaster. O Collaborate with mental health specialists and community partners (e.g., child life, chaplains, therapists, school leaders) to establish follow-up processes with affected families. 	 O Provide telehealth mental health services to local institutions in the event of a disaster. O Advocate for pediatric mental health services at the local and state public health level.
Diversity and Inclusion	 O Obtain culturally tailored and developmentally focused user-friendly parent information sheets regarding disaster events and follow up action items. O Provide appropriate interpreter services (in person or phone-based) and ensure there is a process to meet increased/acute need in a disaster setting. 	 O Create processes and protocols to meet the health care needs of refugees and vulnerable populations, including the displacement of large groups. O Partner with community-based organizations to improve services and advocacy for vulnerable populations. 	 C Lead advocacy efforts to ensure the health care needs of vulnerable populations are protected and prioritized. O Create and disseminate culturally tailored and developmentally focused user-friendly parent information sheets regarding disaster events and follow up action items.



DOMAIN 11: RECOVERY AND RESILIENCY (Continued)

	FOUNDATION	INTERMEDIATE	ADVANCED
Community Partnerships	 C Create partnerships with community organizations (e.g., childcare centers, schools, preschools, etc.) where services can be provided, including screening, primary prevention, and treatment. C Collaborate with community pediatric health providers to promote pediatric resiliency 	 Collaborate with local health care facilities to ensure there is a robust and comprehensive medical home/primary care physician network to leverage during a disaster and assist with follow-up for ongoing needs. Lead coalition with schools and childcare centers to host vaccine clinics. 	 C Lead coalition building among community partners to meet the needs of children in the community and assist in a disaster setting. O Conduct outreach to local clinics and urgent cares to establish a plan for additional surge capacity for lower-acuity illnesses in the event of a disaster or pandemic surge (expanded hours, on- call physicians, etc.). O Create a database of available alternative health care facilities to be used during a disaster that can be easily distributed to the media and disseminated to the public.
Bereavement	 O Create pediatric-specific bereavement policies. O Identify appropriate pediatric-specific referrals available in the community that can be utilized in a disaster. 	O Identify local support services (child life, social work, religious leaders, school counselors) to be available during a disaster and provide support to patients and families in the hospital and community.	 O Disseminate pediatric-specific bereavement strategies to coalition healthcare facilities. O Establish protocols to assist local healthcare facilities in pediatric bereavement during a disaster.



DOMAIN 11 RESOURCES

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FOR ADDITIONAL INFORMATION



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