

NERHCC

Pediatric Surge Annex

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1. Introduction

## 1.1 Purpose

The Northeast Region Healthcare Coalition Pediatric Surge – Special Considerations Annex outlines the plans, processes, and resources that support member collaboration during the response phase of emergencies, natural disasters, and other crises that are specific to a surge including pediatric patients. It is our intent to integrate our pediatric response and address the unique needs children as a part of and not separate from our HCC Response Plan. We recognize that much of pediatric healthcare has developed as a separate and parallel healthcare system. As a result, there are certain special considerations that need to be identified and addressed during an event to best support the children of the within Colorado’s Northeast Region. It is understood that this document is part of the Northeast Region Healthcare Coalition Response Plan.

This annex applies to a mass casualty incident or evacuation with a disproportionately large number of pediatric patients. For the purposes of this annex, pediatric patients are defined as individuals under 18 years old with the flexibility to extend this definition to include 21 and under if necessary. This is due to the many considerations regarding pediatric transport, treatment, supplies, and size of the patient. At the time of the incident it will be important to agree upon the definition of adult versus pediatric patients for that incident.

## 1.2 Scope

This annex supports the NERHCC Response Plan by addressing the specific needs of children and supporting appropriate pediatric medical care during a disaster. It is intended to support, not replace, all existing facility or agency policy or plans by providing uniform response actions in the case of an emergency that involves (or could involve) significant numbers of children within the NE region.

The Pediatric Medical Surge Annex addresses issues of availability of space, personnel, medications, supplies and equipment specific to the pediatric patient population. It outlines the framework of critical response partners (hospitals, healthcare entities, local public health jurisdictions, emergency medical services, emergency managers, and the regional healthcare coalition) in the NER to respond to a large influx, or impending large influx, of pediatric patients.

This annex is a guide for any hospital or NERHCC partner to use in planning and during response to ensure situational awareness during pediatric incidents. It is founded on a system based on surge capacity and capability. Surge capacity is defined as the ability to expand care capabilities to meet sudden and/or more prolonged demand for patient triage and treatment.

Therefore, patient age and acuity need to be considered when determining where children will be treated. Given the variability in pediatric care, all hospitals are requested to plan for an event resulting in a surge of pediatric patients and consider which resources could potentially be shared or requested. Although hospital capabilities and capacity vary, any hospital could be asked to support the medical surge needs of a pediatric medical surge. In rural settings ensuring pediatric supplies and planning takes place with community partners will ensure readiness.

## 1.3 Background

Children have unique anatomic, physiologic, developmental, and medical needs that differ from those of adults. Furthermore, pediatric patients require size-specific equipment and caregivers trained to use that equipment. The following characteristics also present the caregiver with significant challenges when supporting pediatric patients (Table 1).

*Table 1: Unique Consequences in Children During Disaster1*

|  |  |  |
| --- | --- | --- |
| **Characteristic** | **Cause** | **Consequences** |
| Larger head for a given body  weight | High center of gravity | More likely to suffer head injuries and  falls |
| Greater skin surface for body | Evaporative heat and  water losses | Hypothermia and dehydration |
| Closer proximity of solid organs  with less bony protection | Relative size with  younger age | Greater chance of multi-organ injuries |
| Wide range of normal vital signs | Large differences in size, weight, and normal values | Difficult to determine normal values for a given individual, particularly for clinicians more accustomed to caring for  adult patients |
| Rapid heart and respiratory rate | Normal physiologic variables based on age  and weight | Faster intake of airborne agents and dissemination to tissues |
| Wide range of weight across pediatric age range | Normal physiologic variables based on age  and weight | Greater likelihood of medication errors |
| Shorter height | Closer to the ground | Greater exposure to chemical and biologic toxins that settle near the  ground due to higher density |
| Often found in groups | Daycare and school | More likely to see multiple casualties |
| Immature cognitive and coping skills | Age and experience,  psychological development | Less likely to flee from danger, inability to  cope, inability to care for themselves, find sustenance, and avoid danger |
| Small blood vessels | Relative size with  younger age | Difficult venous access, more difficult  fluid and medication delivery |

# 2. Concept of Operations

## 2.1 Plan Activation

When an incident occurs resulting in a surge of pediatric patients to facilities within the NE region which overwhelm local capabilities, NERHCC partners should assess the need for a regional response. Any incident that exceeds the immediate capability of a local agencies and HCC Chapters may indicate a need to activate regional response plans. The decision to activate may be made by a hospital, by an HCC Chapter, or the NERHCC Healthcare Coalition leadership or coordinator.

The NERHCC Pediatric Medical Surge Annex should be activated as needed in response to emergencies or planned events that has a disproportionate number of pediatric patients relative to the capacity of a singular area hospitals’ space, staffing, and resources to care for those patients.

Each hospital can determine which surge strategies to implement to meet the surge of pediatric patients based on their facility’s bed capacity and capabilities. The NERHCC can support the collection / dissemination of essential elements of information per the preparedness / response plan.

## 2.2 Communications

### 2.2.1 Activation

Upon activation of this Annex (2.1) the following information should be gathered and shared across the region for situational awareness. As appropriate, the NERHCC will send out regular alerts to all appropriate partners providing:

* + - * Situational awareness (e.g., incident details, number of patients, number of transported and/or admitted patients, number of possible patients at the scene, potential impact to the healthcare system);
      * Bed availability request(s) to be completed in a specified time frame; and
      * Action items (e.g., conference call, frequent bed availability updates, etc).

### 2.2.2 Systems and Communication Tools

EMSystems and WebEOC may be used for situational awareness and data collection. If an agency needs access to these systems they should contact [nerhcc.co@gmail.com](mailto:nerhcc.co@gmail.com) and the NERHCC Coordinator will connect you with the appropriate point of contact for registration.

Email communications will be utilized to share situational awareness information with all NERHCC partners throughout the incident. Should email fail, please see the NERHCC Continuity of Operations plan.

800MhZ Radio communication is also a common form of technology used to maintain information between hospitals and EMS within the NE region. The NERHCC Preparedness plan addresses radio communication channels and guidance.

### 2.2.3 Messaging

For ongoing communications during a disaster, the Healthcare Coalition can also provide situational awareness to HCC partners according to the NERHCC Response Plan. This may include a survey distributed to appropriate partners gauging incident impacts to space, staffing, and resource capacity and the generation of a Situation Report. The report will be shared with partners to help partners produce an operational picture of the incident.

## 2.3 Agency Roles and Responsibilities

This section provides general guidance to support decision-making regarding the distribution of pediatric patients throughout the region during a pediatric medical surge. These guidelines are intended to supplement, not replace, existing facility, local, and NERHCC plans and processes. Pediatric medical subject matter experts should also be consulted in the triage and distribution of pediatric patients.

This annex assumes that all hospitals within the NERHCC region can work together to accommodate a surge of pediatric patients. This may include decompressing designated hospitals by shifting non- critical patients to other facilities and plans for transportation of critical pediatric patients to

designated pediatric specialty hospitals within Colorado (Children’s Hospital Colorado, Rocky Mountain Hospital for Children). This tactic could make room for the youngest and most critically ill children to be cared for by hospitals most accustomed and prepared to treat critically ill children. As the emergency unfolds, there may be a need for non-pediatric hospitals to absorb less critical and older pediatric patients.

Patients should be distributed to an appropriate level of care given the specific circumstances of the emergency. The intent is to use this as a guide when making patient placement decisions so as to not overwhelm the capacity of any one facility by evenly distributing patients across the region.

For the purposes of this Annex, definitions below are generally accepted for triage categories:

* **Red-triaged patients**: critical/unstable; immediate life threat; presents clinically with altered mental status/respiratory distress/signs of shock/truncal penetrating injury
* **Yellow-triaged patients**: moderately injured or ill/potentially unstable; potential life threat (within hours); presents as generally non-ambulatory with injury that may become life- threatening if left untreated
* **Green-triaged patients**: minor or non-injured/stable; no immediate life threat; generally ambulatory with isolated injuries that should not be life or limb-threatening

### 2.3.1 NER Hospital Partners

During a response to a pediatric medical surge all NERHCC hospital partners should be able to:

* Follow organizational referral protocols and transport criteria with respect to pediatric patients
* Monitor for and acknowledge alerts, notifications, and communications during an incident
* Provide relevant and timely information as requested to local, regional, and state partners
* Maintain appropriate users in EMSystems to receive and monitor notifications
* Maintain frequent communications with the NERHCC and others as deemed appropriate.

### 2.3.2 Non-Hospital Partners

Coalitions serve as multiagency coordination groups that support and integrate with ESF-8 activities in the context of incident command system (ICS) responsibilities. As such, the Coalition Response Plan is built on the premise that Coalition members understand and respond in accordance with their appropriate response capability and responsibility. Key individual healthcare and response organizations include those of public health, EMS, Emergency Management, and healthcare partners.

Non-hospital partners should also support a response to a pediatric medical surge by maintaining appropriate users in EMSystems to receive and monitor notifications and maintaining frequent communications with the NERHCC HCC and others, as necessary.

## 2.4 Logistics

In a disaster, many patients presenting for care may cause a “surge”. Surge is determined by the number of patients that a hospital can receive while maintaining usual standards of care. For each of the critical system components needed to respond to a medical surge incident, space, staff, and supplies, there are three measurements that provide guidance to overall surge capacity at each of the tiered levels. An incident does not have to overwhelm assets in all three categories to have an impact on healthcare operations within the region:

**Conventional capacity** is the ability to manage a surge, while operating daily practices with little or no impact to the patients or facility. The spaces, staff, and supplies (resources) used are consistent with daily practices within the institution.

**Contingency capacity** affects the ability for daily practices to be consistent but has minimal impact to usual patient care. At this point, the demand for resources has not exceeded local resources. The spaces, staff and supplies (resources) used are not consistent with daily practices but provide care that is functionally equivalent to usual patient care.

**Crisis capacity** may require adjustments in care not consistent with daily practices, but the standard of care is coherent within the setting of an emergency. The best possible care is provided to patients under these circumstances. Adaptive spaces, staff and supplies (resources) used are not consistent with usual standards of care but provide sufficiency of care in the context of a catastrophic disaster (ie. Provide the best possible care to patients given the circumstances and resources available).

Table 3 below demonstrates how each stage of surge capacity could potentially be managed as the number of pediatric patients increase.

*Table 3 Pediatric Medical Surge Response Strategies*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Conventional Capacity** | **Contingency Capacity** | **Crisis Capacity** |
| **Supplies** | * Facilities are able to order more supplies through normal channels | * Stockpiled supplies are being used * Supplies are being ordered through rushed delivery methods * Resource requests to local health jurisdictions and   emergency management | * Regional pediatric resources (ACF trailers and go bags) may be requested through the REDi HCC * If local partners and REDi cannot fill the demand, requests may be made up to the state level |
| **Space** | * Cancel elective procedures * Use in-place elective procedures * Begin surge discharge | * Clear patients from pre-induction and procedure areas * Fill all available beds * Begin bed availability reporting (WATrac) | * Decompress hospitals * Place patients in hallways or lobby areas as needed * Set up temporary structures in order to increase space capacity * Request use of other facilities |
| **Staff** | * Use all staff trained to care for pediatrics to provide care | * Request additional pediatric trained staff from other hospitals | * National Disaster Medical System (NDMS) * Utilize staff not trained for pediatric care after providing   just-in-time training |

###### 2.4.1 Space

As requested, the NERHCC support facilities in identifying additional space conducive to pediatric care. Space should adhere to all regulatory requirements or to the Colorado Crisis Standards of Care when activated.

Spaces can be categorized as follows:

* **Conventional Spaces***:* Areas where such care is normally provided (e.g., treatment space inside a hospital or physician’s office space).
* **Contingency spaces:**Areas where care could be provided at a level functionally equivalent to usual care (e.g., adult rooms used as pediatric units, closed units).
* **Crisis Spaces:**Areas where sufficient care could be provided when usual resources are overwhelmed (ambulatory care pediatric providers supervising inpatient care, or alternative space).

###### 2.4.2 Staff

As requested by ESF-8/health and medical branch or an HCC member organization, the NERHCC can help support facilities in coordinating strategies for increasing/maintaining pediatric staffing levels.

Staff strategies can include:

* Assigning pediatric trained staff to larger numbers of patients, younger patients (e.g., age <8), or the more injured/ill to closely monitor fluids, medications, etc
* Non pediatric nursing and other staff would take over patients that require less precise management
* Implement just-in-time training when needed to expand pediatric expertise when the response timeframe allows.
* Use of telemedicine as an adjunct for in-person staff.

Actions to augment or increase pediatric staffing should be aligned with existing hospital/facility policies or Colorado Crisis Standards of Care.

Sources of staff with potential pediatric subject matter expertise may include providers (physicians, nurses, physician assistants, nurse practitioners, and others) working in emergency medicine, pediatrics, family medicine, anesthesia, ENT, pediatric surgery, trauma surgery, general surgery, orthopedics, urology, neurosurgery, thoracic surgery, the OR, PACU, ICUs, inpatient units and outpatient clinics, pharmacy, or respiratory therapy. Pediatric home health agencies may also be able to augment pediatric surge incidents. Additionally, staff in other categories/areas may have experience with pediatric care that provides them with a level of comfort and expertise allowing them to assist in care during a disaster.

Just-in time training may need to be provided to train additional staff to care for pediatric patients. As needed, receiving hospitals should video call providers at hospitals that traditionally provide specialized care for pediatric patients.

###### 2.4.3 Supplies

The NERHCC does not currently have coalition level equipment. As regional and state pediatric disaster planning evolves, we expect to include guidelines for hospitals developed in coordination with Emergency Medical Services for Children, The Colorado Dept. of Public Health and Environment, and the Colorado Pediatric Disaster Coalition. The NERHCC also hopes to determine how stockpiles of different supplies could be stored and rotated so it might be available during a pediatric surge.

Most emergency departments have some pediatric supplies, but they are limited in quantity and may have issues sustaining pediatric patients if they are unable to acquire more supplies or transfer the patients. Children 14 years of age and older (or of certain size) may be able to use adult medical supplies.

# 3. Operations

## 3.1 Triage

In the event of a pediatric surge incident, EMS will triage patients in the field according to their standard of care. Hospitals will perform secondary triage upon patient arrival to determine the best setting for a patient to receive definitive care.

## 3.2 Treatment

The treatment of pediatric patients even during a mass casualty or surge event is the responsibility of the hospital and treating practitioners. The NERHCC encourages member hospitals to develop and exercise a pediatric surge plan that address how it will maintain the best care when the demand for pediatric services and/or transport exceeds supply. This includes, but is not limited to: how information on patients will be shared between facilities; how patients will be prioritized for transfer to specialty care; transfer agreements with a hospital providing definitive pediatric specialty care; and agreements that allow access to pediatric specialty consultation through telemedicine.

## 3.3 Patient Distribution / Placement (DMCC) Messaging

In an emergency that produces a volume of pediatric patients beyond the scope of a single receiving hospital, the NE region RETAC may be used to efficiently coordinate the distribution of all affected patients to appropriate points of care. The role of the RETAC will be to identify the appropriate clinical match for each patient to receive the most appropriate care that will ensure the safety and health of the patient. The intent is to ensure that patients are distributed evenly throughout the region so no one facility is overwhelmed, and normal operations of the healthcare system are sustained

## 3.4 Patient Tracking

Accurate and timely tracking of patients in a patient surge is vital to avoid adverse consequences for patients, their families, responding organizations and the community recovery as a whole. Families will expect hospitals to provide identification of all patients affected by disaster, access to accurate and timely information and real-time updates, and assistance to reunify with their loved ones. In the case that this annex is activated, pediatric patients should be tracked to facilitate timely situational awareness and determine and document patient identity, location, and involvement in the incident.

EMSystems allows agencies to update their status and bed availability. It also provides surgical specialist availability, emergency notifications, emergency contacts, an online chat feature (Command Center), survey building (to locate resources, assess vulnerabilities, or define levels of capability), and patient tracking. EMSystems specifically includes specific beds types relevant to a pediatrics: Peds Med/Surge, Labor and Delivery, Neonatal ICU, Nursey, and Pediatric ICU beds.

## 3.5 Patient Movement

There is currently no NERHCC Patient Movement Annex. Plans for the development of such an annex are underway. Healthcare will work with EMS to coordinate appropriate transportation. Facilities will follow their own Emergency Operations Plans for coordination of other transportation and staging, other needs and issues. Hospitals with Pediatric Trauma Level designations have Pediatric Transfer Agreements in place.

# 4. Special Considerations

## 4.1 – Behavioral Needs / Issues

As requested by ESF-8/health and medical branch or an HCC member organization, The HCC will work through existing protocols and procedures to identify pediatric behavioral health needs and request behavioral health resources for children, caregivers, and providers.

## 4.2 – Hazardous Materials / Decontamination

As requested by ESF-8/health and medical branch or an HCC member organization the NERHCC will assist in coordinating pediatric decontamination resources and supplies. To help insure that hospitals are adequately prepared to provide appropriate decontamination to children the HCC will provide guidance found in **Appendix 1.3 Pediatric Decontamination**.

## 4.3 – Infectious Disease

The NERHCC will support local ESF-8/health and medical groups in the management and care (including behavioral health) of children exposed or potentially exposed to a highly infectious disease (and minimize exposure to others, including caregivers). All activities will be coordinated with local and state highly infectious disease plans (where available) and with identified epidemiologists.

## 4.4 - Transportation

Sending and receiving hospitals work together to prioritize specialty patient transfers. When possible, the state ESF-8 Lead will provide a subject matter expert to help hospitals identify the appropriate pediatric center to receive a specific patient.

Requests for inter-facility transport of a specialty pediatric patient can come from either the sending or receiving facility. However, each EMS Agency is responsible for coordinating and prioritizing patient transfers based upon state and regional regulations and protocols and the availability of resources.

## 4.5 Displaced or Unaccompanied Children

Colorado does not have a statewide system for tracking and identifying displaced/unaccompanied children and identification of parent/guardian. Through collaboration with local partners and the ESF-8 lead(s), the NERHCC will support the state, county and/or local efforts to reunify pediatric patients and/or missing children of adult patients within and outside the coalition, for both pediatrics surge events where children can be separated from parent/guardian and in the event of a healthcare facility evacuation.

Support activities will include:

* Supporting local plans for identifying and locating missing family members (include a description of local plans & protocols such as using 211.)
* Supporting the use of the National Center for Missing and Exploited Children Unaccompanied Minor Registry <https://umr.missingkids.org/umr/reportUMR?execution=e1s1>by all healthcare providers during a disaster or emergency to report unaccompanied minors in their care. (This does not supersede or replace other protocols such as reporting the child to police/sheriff and child welfare.)
* Supporting the use of the National Center for Missing and Exploited Childre [http://www.missingkids.com/](%20http://www.missingkids.com/%20) by all healthcare providers for reporting missing children of adult patients.
* Supporting the establishment of Family Assistance Center(s) with the jurisdiction.
* Coordinating with other agencies (such as public schools and the American Red Cross) involved in family reunification

## 4.6 – Evacuation

As requested by ESF-8/health and medical branch or an HCC member organization, the NERHCC will assist in coordinating pediatric patient movement and identifying appropriate receiving facilities both inside and outside of the region, as requested during an evacuation. This will include Pediatric/Neonatal Intensive Care units. All activities will be consistent with the HCC evacuation response plan located *Insert location.*

## 4.7 - Security Considerations

As requested by ESF-8/health and medical branch or an HCC member organization, the NERHCC will assist in identifying additional security resources as requested to support pediatric safe areas, family reunification sites, and the incident scene.

The HCC will encourage member agencies and organizations to ensure that adequate plans exist at all facilities for keeping children with caregivers as much as possible. In addition the HCC will encourage members to have detailed security plans for protecting children against kidnapping and predation that include the childproofing of areas not intended for pediatrics.

## 4.8 - Pediatric Centers and Resources in Colorado

* Children’s Hospital Colorado – Regional Pediatric Trauma Center
* Rocky Mountain Hospital for Children Presbyterian/St. Luke’s – Level IV Pediatric Emergency Department
* Denver Health Pediatric Emergency Care Center – Level I Pediatric Emergency Department
* Primary Children’s Hospital – Level IV Pediatric Emergency Department
* St. Vincent Healthcare – Level III Pediatric Emergency Department

## 4.9 Pediatric Resources

Emergency Medical Services for Children Colorado Mountain States Pediatric Disaster Coalition.

# Appendix A – Access and Functional Needs Guidance for Peds Surge

Delivering healthcare to children and maintaining children’s healthy functioning during disasters often relies on the involvement and functioning of parents and other caregivers. Children and their caregivers also have intersectional identities and lived experiences that inform what they need to access or function while receiving effective, equitable healthcare. The C-MIST framework organizes access & functional

needs into five big areas that affect community members’ functioning and access to services. Consider these examples and other needs that you identify in these 5 functional areas as they affect children, their families/caregivers and the healthcare system’s ability to provide services to children. Integrate these

needs into your HCC’s planning and resource management.

**C – Communication**

Communication is crucial to delivering healthcare and maintaining the dignity and consent of patients while delivering services. Functional services and practices that support communication must be planned for as critical staff and infrastructure in healthcare systems.

* Developmentally, children have lower literacy, vocabulary, and comprehension skills to understand their safety and what is happening during a disaster, but they still need communication to involve them and help them function.
* Children and their caregivers/communities may need communication in alternate language or formats or need access to assistive technology devices. Consider pediatric demographics and whole household/community demographics within the HCC that affect communication needs. What language service resources - interpretation, translation, culturally-informed staff or community brokers – need to be identified or maintained in disasters?
* Resource for community demographics and resource partners:<http://www.cohealthmaps.dphe.state.co.us/colorado_community_inclusion/>

**M – Maintaining Health**

* Consider limits on specialty pediatric health services or equipment in the HCC – how many children could be supported at the same time? How many kids use those services regularly? If that capacity is exceeded or surged, how will those needs be addressed? Include services for:
  + children with serious mental health or emotional disturbance needs
  + children using durable medical equipment or medical services (home health, transportation)
  + other known groups of children or youth with special healthcare needs
* Additional resource for community/regional information about pediatric healthcare needs: HCP program contacts: [https://docs.google.com/spreadsheets/d/1rdzcjr3E- gZxPcGNwloKuc4W5W8l8Tag1vmlzc8W0kY/edit#gid=1218008202](https://docs.google.com/spreadsheets/d/1rdzcjr3E-gZxPcGNwloKuc4W5W8l8Tag1vmlzc8W0kY/edit#gid%3D1218008202)
* Resource available: [**Questions to Ask for Identifying Communication and Accommodation Needs**](http://www.jik.com/pubs/VerifyingNeeds.doc)

**I - Independence**

Children and their family members/caregivers may maintain their independence through devices, services, practices and other environmental accommodations. Independence needs must be considered in delivering healthcare but not misunderstood as evidence of medical need or limited agency and competence. In a disaster, someone with power dependence or non-medical care services does not need to be brought to healthcare settings unless there are other health concerns. Equipment and services that allow people to maintain their independence should be integrated in healthcare settings to support equal access to services in the least restrictive and most integrated environment.

* Involve community partners that address children’s independence and functioning in HCC planning.
  + Resource for early childcare, disability and special education partners/resources: [http://www.cohealthmaps.dphe.state.co.us/colorado\_community\_inclusion/child\_youth\_r esources/](http://www.cohealthmaps.dphe.state.co.us/colorado_community_inclusion/child_youth_resources/)
* Consider transfer, examination equipment for pediatric patients, including pediatric patients with disabilities or other physical functioning supports
* Resource available: [**Questions to Ask for Identifying Communication and Accommodation Needs**](http://www.jik.com/pubs/VerifyingNeeds.doc)

**S - Safety/Services/Supports**

This functional need area can capture other resources or practices that help to preserve children’s safety

and other services or supports they rely on for their well-being and functioning.

* Consider protocols for family notification and reunification used by HCC members and how they might be supported by the whole coalition. Key questions to HCC agency partners:
  + How is patient tracking or family notification/reunification built into the services or agreements set with your patients/clients?
  + How do you address family notification/reunification in preparedness planning with your patients/clients?
  + What agency practices do you currently have in place for patient tracking and family notification/reunification?
  + If a patient/client is displaced from where they were originally receiving services, how are families or social supports made aware?
  + What coordination or assistance for family reunification would be helpful from the HCC or fellow HCC agencies?
  + What barriers or difficulties can you imagine having with family reunification at your agency?
* Consider where child-friendly spaces might be needed and maintained.

**T - Transportation**

* Children are generally reliant on adults to be transported different places and may need physical supports to be transported safely. Information on specialty agencies or resources for pediatric transportation should be identified if available.
* Single parent households, or households with no vehicle access may experience barriers to accessing healthcare in disasters. [CICOmaps](http://www.cohealthmaps.dphe.state.co.us/colorado_community_inclusion/general_indicators/) include these demographics.
* Transportation resources from schools and other providers that serve children may be sought for other transportation needs – including healthcare - during disasters and may need to be deconflicted.
* Colorado recognized that some early childcare facilities (i.e. summer camps) are licensed to serve large numbers of children but do not always have enough transportation resources to move them if evacuation is necessary.

# Appendix B – Pediatric Decontamination

The US Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) and the US Department of Homeland Security (DHS) Office of Health Affairs published the nation’s first evidence-based guidance for mass decontamination. The guidance, titled “[Patient Decontamination in a Mass Chemical Exposure Incident: National Planning Guidance for](http://www.phe.gov/Preparedness/responders/Documents/patient-decon-natl-plng-guide.pdf) [Communities](http://www.phe.gov/Preparedness/responders/Documents/patient-decon-natl-plng-guide.pdf)”, informs planning and response for a wide variety of situations, from local chemical plant accidents to terrorism incidents, and covers mass casualties, chemical release, external contamination, and decontamination of people. Certain details related to children are included. HHS and DHS have started developing a companion guidance document focused on decontaminating pediatric patients.

**Decontamination of Children:**

Whether because of an accidental release at a chemical plant, a transportation accident, or an intentional terrorist action, the threat of exposure of the public to hazardous chemicals is real.

Children are particularly vulnerable to aerosolized biologic or chemical agents because they normally breathe more times per minute than adults, and they would be exposed to larger doses than adults in the same period. Children are also more vulnerable to agents that act on or through the skin because their skin is thinner, and they have a larger skin surface-to-body mass ratio than adults.

Children will require different advanced planning and supplies for decontamination. For example, children, especially young children, are more at risk of hypothermia and therefore require heated water or decontamination conducted in a site more protected from cold environments. Each hospital must have its own system or plan for decontamination, with protocols specific to children.

**Need for Decontamination:**

Decontamination is the removal or reduction of harmful substances from a patient's body. The goal of decontamination is to ensure that a toxic substance, whether chemical, biological, or radiological, is no longer in direct contact with the patient. This prevents further absorption by the patient and will decrease the possibility of transfer of the toxic substance to health care workers.

The following are tips and suggestions for decontaminating children:

* Staff helping with decontamination should receive training on the vulnerabilities of children and how to address these.
* Children should be prioritized before adults within the same decontamination priority group.
* Unless strictly contraindicated due to medical needs, families should undergo decontamination together. Children and parents may become upset if separated from family members during decontamination. Keeping children with their parents or caregivers may reduce psychological stress for all family members and decrease the need for additional assistance from responders or health care personnel.

Children will take more time to disrobe and prepare (emotionally) for the decontamination. Parents may fear that the privacy, safety, and welfare of their children are not protected if they are cared for by responders of the opposite gender. Children of certain ages may become more anxious when asked to disrobe, and it is recommended to have both male and female personnel to assist children. A [study](http://www.hhs.gov/about/news/2016/05/10/hhs-sponsored-study-shows-disrobing-vital-decontamination-method.html) sponsored by the HHS revealed that 99% of chemical contamination can be eliminated by carefully removing clothes and wiping skin with a paper towel or dry wipe.

* The risk of adverse consequences of water-based decontamination may be greater in children; warming measures will be necessary. The water temperature should be 98◦ to 110◦ F out of tap, and foil/metallic blankets should be used post decontamination for ease of use and disposal.
* Hospital personnel should take care to ensure each child's airway remains open and protected during decontamination.
* Low pressure shower systems should be used to decontaminate children.
* Infants and young children can be slippery when wet and will require a system to ensure their safety (eg, hand spraying while on a stretcher, in a bassinet, or laundry basket with holes).

**Psychological Support:**

* When children are exposed to circumstances that are beyond the usual scope of human experience, they may have difficulty understanding and coping with the events and may need support from adults. See additional information on [Promoting Adjustment and Helping Children Cope.](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Promoting-Adjustment-and-Helping-Children-Cope.aspx)
* For unaccompanied minors, psychosocial support should be provided in a pre-designated child safe area with age appropriate activities.
* When appropriate, self -care decontamination (actions that a patient can perform for him/herself) can have a positive impact on children following a chemical exposure. Consider developing standard protocols and kits to support self-care decontamination.

To ensure that the unique physical and emotional needs of children are met during times of disaster, the pediatrician should be involved in community preparedness planning in advance of a disaster.

**Decontamination Resources:**

[Biological Terrorism and Agents](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Biological-Terrorism-and-Agents.aspx) (AAP)

[Chemical Terrorism and Agents](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Chemical-Terrorism-and-Agents.aspx) (AAP) [Decontamination of Children](https://www.youtube.com/watch?v=ctt6RJGMV9Y) (HHS) [Decontamination of Poisoned Children](http://www.uptodate.com/contents/decontamination-of-poisoned-children) (UpToDate)

[Domain 4 of the EMSC Pediatric Disaster Checklist for Hospitals](https://emscimprovement.center/media/emsc/files/pdf/emsc_resources/checklist_ped_domains/Checklist_HospitalDisasterPrepared2125.pdf?la=en) (EMSC) [Dropbox of Pediatric Decontamination Resources](https://www.dropbox.com/sh/ti5wnkxj6uybczh/AABZgEScq_I_9dmEBplEIliXa?dl=0)

[Essential Pediatric Domains and Considerations for Every Hospital's Disaster Preparedness Policies -](https://emscimprovement.center/resources/publications/checklist-essential-for-every-hospitals-disaster-preparedness-policies/) [Domain 4](https://emscimprovement.center/resources/publications/checklist-essential-for-every-hospitals-disaster-preparedness-policies/) (EMSC)

[Hospitals](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Hospitals.aspx) (AAP)

[Principles of Pediatric Decontamination Article](http://www.ny2aap.org/pdf/Disaster/186.pdf) (Clinical Pediatric Emergency Medicine)

[Radiologic or Nuclear Terrorism and Agents](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Radiologic-or-Nuclear-Terrorism-and-Agents.aspx) (AAP) [Talking to Children About Disasters](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Talking-to-Children-About-Disasters.aspx) (AAP)

[Decontamination Decoded: Disrobing, Dry Wiping Removes 99% of Chemical Contaminants (ASPR Blog)](https://www.phe.gov/ASPRBlog/pages/BlogArticlePage.aspx?PostID=306)

# Appendix C – Children’s Hospital Transfer Agreement Template

The following document is a template from Children’s Hospital Colorado which can be used for establishing pediatric patient transfer agreements. This template is not binding until completed and signed by each agency and is being provided as a resource.

##### PEDIATRIC TRANSFER AGREEMENT

###### This Agreement is made this January 06, 2020 by and between Children's Hospital Colorado (Children's Colorado) and (Transferring Facility), (individually referred to as "Party" and collectively referred to as "Parties').

WHEREAS, Children's Colorado is a Level I Regional Pediatric Trauma Center; and,

WHEREAS, both Children's Colorado and Transferring Facility desire, by means of this Agreement, to assist physicians and the Parties hereto in the treatment of pediatric trauma patients and pediatric patients requiring specialty care;

WHEREAS, the Parties specifically wish to facilitate (a) the timely transfer of patients and information necessary or useful in the care and treatment of pediatric patients transferred, (b) the continuity of the care and treatment appropriate to the needs of pediatric patients, and (c) the utilization of knowledge and other resources of both facilities in a coordinated and cooperative manner to improve the professional health care of patients.

IT IS THEREFORE AGREED, by and between the Parties as follows:

**1.0 PATIENT TRANSFER.**

In the event that a physician who is a member of Transferring Facility's medical staff ("Transferring Facility Physician") determines that a pediatric patient requires specialized services offered at Children's Colorado, the Transferring Facility Physician shall contact, by telephone, Children's Colorado's Transfer Center at 720-777-3999 to obtain confirmation that Children's Colorado has the capability and capacity to treat the patient and will accept the patient. It is expressly agreed and understood that Children's Colorado does not allocate any specific hospital beds under this Agreement and shall not be obligated to accept the transfer of any patient to Children's Colorado unless all conditions of eligibility for admission as set forth in the Emergency Medical Treatment and Active Labor Act ("EMTALA"), statewide or regional trauma or Emergency Preparedness Plan are met and Children's Colorado has the requisite capability and capacity to stabilize the patient. Prior to initiating the transfer, the Transferring Facility Physician must receive confirmation from Children's Colorado's Transfer Center that Children's Colorado will accept the patient. Acceptance of the patient by Children's Colorado will be made pursuant to Children's Colorado admission policies and procedures.

**2.0 TRANSFERRING FACILITY'S RESPONSIBILITIES.**

Transferring Facility agrees that it shall:

1. Notify Children's Colorado as far in advance as possible of transfer of a pediatric patient.
2. Transfer to Children's Colorado the personal effects, including money and valuables and information relating to the same.
3. Make every effort within its resources to stabilize the patient to avoid all immediate threats to life and limbs. If stabilization is not possible, Transferring Facility shall either establish that the transfer is the result of an informed written request of the patient or his or her surrogate or shall have obtained a written certification from a physician or other qualified medical person in consultation with a physician that the medical benefits expected from the transfer outweigh the increased risk of transfer.
4. Complete the transfer to Children's Colorado through qualified personnel and appropriate transportation equipment including the use of necessary and medically appropriate life support measures.
   1. **MEDICAL RECORDS.**

Transferring Facility agrees to send a copy of all of the patient's medical records with the patient that is available at the time of transfer to Children's Colorado. All medical records that become available after the patient is transferred to Children's Colorado shall be sent to Children's Colorado as soon as practicable. The copy of the medical record should include, but is not limited to the following:

* + 1. The patient's name, address, Transferring Facility's number, date of birth or approximate age, the name, address and phone number of the patient's parents, guardian or legal representative (if known);
    2. The history of injury or illness;
    3. The patient's condition upon presentation to Transferring Facility;
    4. The patient's vital signs upon arrival at Transferring Facility, throughout the patient's stay at the Transferring Facility, and at the time of transfer;
    5. Treatment provided to patient, including medications given at Transferring Facility, route and time;
    6. Laboratory and original x-ray results;
    7. Fluids given, by type and volume;
    8. Name, address and phone number of Transferring Facility Physician referring patient to Children's Colorado;
    9. Third-party billing data (if known);
    10. Name of individual at Children's Colorado's Transfer Center who was contacted and provided consent for the transfer on behalf of Children's Colorado.

Transferring Facility agrees to supplement the information described above as is necessary for the maintenance of the patient during transport or for treatment upon arrival at Children's Colorado.

**4.0 PATIENT CONSENT.**

Transferring Facility shall obtain consent to the transfer from the minor's parent, guardian or legal representative if appropriate and/or possible. If the patient is not a minor, and is conscious and has decision-making capacity, Transferring Facility shall obtain patient's consent.

**5.0 RETURN OF PATIENT.**

When a Children's Colorado Physician determines that the patient no longer requires the specialized care of Children's Colorado, Transferring Facility agrees to accept the return transfer of the patient subject to Transferring Facility's capability and capacity to render the necessary continuing care and all federal and state regulations have been met and if the Children's Colorado Physician so requests and the patient or if appropriate his/her parents, guardian or legal representative consents to the return transfer to Transferring Facility.

**6.0 BILLS**

Charges incurred with respect to services performed by either Party to the Agreement shall be collected by the Party rendering such services directly from the patient or any third-party payors. Neither Party shall have any liability to the other for such charges.

**7.0 LIABILITY.**

Each Party shall be responsible for its own acts and omissions and shall not be responsible for the acts and omissions of the other Party.

**8.0 ADVERTISING AND PUBLIC RELATIONS.**

Neither Party shall use the name of the other in any promotional or advertising material without first obtaining prior written consent of the other Party. Both Parties shall deal with each other publicly and privately in an atmosphere of mutual respect and support and each Party shall maintain good public and patient relations and efficiently handle complaints and inquiries with respect to transferred patients.

* 1. **TERM AND TERMINATION.**

The term of this Agreement shall be three years, commencing as of the Effective Date

and continuing until the third anniversary of the Effective Date ("Initial Term"). This Agreement may be terminated with or without cause, and without penalty, by either Party upon ninety (90) days' advance written notice to the other Party. The Agreement shall be automatically terminated should either Party fail to maintain its licensure or certification as provided by applicable Federal and State laws. Either Party may terminate this Agreement immediately in the event of a material breach, the non- breaching Party may terminate this Agreement immediately by providing written notice of the breach to the other Party.

**10.0 ASSIGNMENT.**

Neither this Agreement, nor any interest or right in the Agreement, nor any powers, privileges, duties or obligations under this Agreement may be assigned, transferred or delegated without prior written consent of the other Party and any purported assignment, transfer or delegation without such consent shall be of no force and effect.

**11.0 NO THIRD PARTY BENEFIT.**

This Agreement shall benefit and burden Transferring Facility and Children's Colorado in accordance with its terms and conditions and is not intended, and shall not be deemed or construed, to confer any rights, powers, benefits or privileges on any person, firm, corporation or other entity other than the Parties stated above.

**12.0 WAIVER.**

The waiver of strict compliance or performance of any term or condition of this Agreement by either Party shall not be deemed a waiver of any other failure to comply strictly with or to perform such term or condition or any other term of condition of this Agreement.

**13.0 MODIFICATION**

This Agreement may be modified or amended from time to time by mutual agreement of the Parties, and any such modification or amendment shall be attached to and become part of the Agreement.

* 1. **AFFIDAVIT OF COMPLIANCE.**

Each Party to this Agreement certifies and agrees that:

* + 1. They are not currently excluded by the Federal Government from participating in federally funded programs, including Medicare, Medicaid and Tricare.
    2. They are not currently under investigation for health care fraud or any illegal activity at this time.
    3. They are not aware as of the date of signing this Agreement of any such investigation in which they are likely to become involved in the future.
    4. There has been disclosure of any loss of Federal Government program participation in the past, which sanction has since been set aside has been disclosed, and a copy of the notice of Federal Government program reinstatement has been provided to the other Party.
    5. Should either Party become the subject in the future of any investigation relating to health care fraud, any illegal activity, or face the possibility of loss of participation in any federally funded programs, that Party will provide immediate written notice to the other Party describing the activity or investigation.
    6. They will comply with the Emergency Medical Treatment and Active Labor Act of 1986 and the Health Insurance Portability and Accountability Act of 1996 and the rules now and hereafter promulgated thereunder.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement, individually or by signature of their duly authorized representative, as of the last date of a Party's signature date set forth below.

Children's Hospital Colorado

Signature: Signature:

Printed Name: Printed Name:

Title: Title:

Date: Date:

# Appendix D – Hospital Guidelines for Pediatric Patients in Disaster

The following document is provided as a resource, developed by the Northwest Healthcare Response Network (HCC) in Seattle Washington. This can be used as a resource for NERHCC hospital partners when planning for pediatric response.



**Hospital Guidelines for**

**Management of Pediatric Patients in Disasters**

Created by:

King County Healthcare Coalition Pediatric Triage Task Force Public Health – Seattle & King County

Contains material adapted from:

“Children in Disasters: Hospital Guidelines for Pediatric Preparedness,” 3rd Edition (2008),

available at: <http://www.nyc.gov/html/doh/downloads/pdf/bhpp/hepp-peds-childrenindisasters-010709.pdf>

Pediatric Triage Task Force and Contributors

Francois P. Aspesberro, MD Carolyn Blayney, RN

Pediatric Critical Care Medicine Nurse Manager Burn Surgery ICU &

Seattle Children’s Hospital Pediatric Trauma ICU Harborview Medical Center

Brian D. Johnston, MD, MPH

Chief of Service, Pediatrics E. Anne Newcombe, RN

Harborview Medical Center Clinical Director

Associate Professor, Pediatrics Emergency Services

University of Washington Harborview Medical Center

Mary A. King, MD, MPH Jerry J. Zimmerman, MD

Medical Director, PICU Division Chief, Critical Care Medicine

Harborview Medical Center Professor, Pediatrics

Assistant Professor, Pediatrics Seattle Children’s Hospital Seattle Children’s Hospital

Kathryn Koelemay, MD, MPH Medical Epidemiologist

Public Health – Seattle & King County

Affiliate Assistant Professor, Dept of Health Services University of Washington School of Public Health

Steven H. Mitchell, MD Associate Director

Division of Emergency Medicine Harborview Medical Center

Vicki L. Sakata, MD

Pediatric Emergency Services Mary Bridge Hospital

Clinical Faculty, Emergency Medicine Service University of Washington Medical Center

Melody Schlaman, RN Emergency Services Swedish Medical Center

Jamie Shandro, MD, MPH

Assistant Professor, Emergency Medicine Harborview Medical Center

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Job Action Sheets:

Pediatric Service Unit Leader Pediatric Logistics Unit Leader Safe Area Coordinator

Pediatric Safe Area Checklist Safe Area Registry

Sample Menu

After a Disaster: Reactions of children & letter for parents Patient Evacuation Tracking Form

# Hospital Planning for Pediatrics during a Disaster

###### **General Guidelines:** Here are 10 steps in planning to prepare for management of pediatric patients at every King County hospital. Start with Step 1 and, as more individuals become involved, the planning will move more smoothly and quickly.

**All hospitals should plan for arrival of pediatric patients**

* Pediatric patients might present to ANY hospital
* Critically ill pediatric patients might present to ANY hospital
* Transfer of patients to specialized hospitals might not be feasible

1. Survey staff to identify in-house pediatric expertise

* Hospitals and networks should survey staff and admitting physicians to develop a database of personnel with pediatric experience, training and willingness to join a response team.
* Identify key pediatric positions that staff will occupy in a disaster (see below).
* Include notification procedures for key staff and response team members in the plan.

1. Create pediatric leadership positions for key personnel and qualified staff

* Physician Coordinator for Pediatric Emergency Care in a Disaster

-coordinates pediatric disaster care and planning

-serves as regular member of the Hospital Disaster Committee

* Nursing Coordinator for Pediatric Emergency Care in a Disaster

-coordinates pediatric disaster care and planning

-serves as regular member of the Hospital Disaster Committee

* Pediatric Safe Area Coordinator

-ensures the pediatric safe area is properly staffed and stocked for an emergency

-ensures the safety of children awaiting appropriate disposition

* Pediatric Logistics Unit Leader

-ensures that children’s needs are addressed by Procurement, Transportation, Materials Supply and Nutritional Supply during an emergency

* Pediatric Services Unit Leader

-ensures that the pediatric treatment and holding areas are properly assigned, equipped and staffed during an emergency, including trained triage Visual Inspection Officers (see page 26).

1. Increase pediatric and disaster training

* Train more medical staff to provide appropriate basic and advanced emergency care and trauma life support to children
* Offer Neonatal Advanced Life Support (NALS), Pediatric Advanced Life Support (PALS) and the Emergency Nursing Pediatric Course (ENPC) to hospital staff on an ongoing basis
* Arrange updates and re-certifications

1. Plan for appropriate pediatric equipment

* Establish a baseline surge capacity and capability for pediatric patients for estimating essential inventory; estimate generously.
* Consider creating and stocking pediatric disaster carts in designated areas, including a cart specifically for a Pediatric Critical Care Area in the emergency department.

1. Plan for appropriate pediatric pharmaceuticals

* Establish procedures for maintaining disaster carts (resuscitation medications/kits/color- coded bags)
* Maintain and update an inventory of essential drugs (72-hour supply) 6. Plan for providing appropriate pediatric nutrition
* Maintain a five-day food and drinking water supply for use during an emergency, including age-appropriate nutritional supplies for both healthy children and those with special dietary needs
* Consider Memoranda of Understanding with area stores for delivery of additional supplies 7. Plan for special security needs of children
* Plan a Pediatric Safe Area (PSA) to hold uninjured, displaced or released children who are awaiting adult caregivers (see page 15)
* Designate a PSA Coordinator as part of this planning and identify staffing personnel
* Develop a system to track both accompanied and unaccompanied children
* Develop a protocol to rapidly identify and protect displace children, including recording key identifying information for use in later tracking and reunification with caregivers

1. Plan for transport issues

* In case transfer is delayed, prepare to provide extended care to children during a disaster, including provision of equipment for age-appropriate internal transport
* Hospitals without pediatric intensivists or trauma surgeons should develop a plan with pediatric intensive care specialists and trauma surgeons at outside hospitals to provide, at the minimum, telephone consultations or support for admitting physicians

1. Add special considerations for children to your Hospital Decontamination Plan

* Develop a system to keep children with their caregiver, unless medical issues take priority
* Incorporate high-volume, low-pressure water delivery systems (e.g., handheld hose sprayers) that are “child-friendly” into the hospital decontamination showers
* Minimize risk of hypothermia

1. Develop and exercise a hospital-based disaster triage system

* Establish treatment and evaluation areas that are separate from ED critical areas for lower priority patients
* Use clinicians who are accustomed to evaluating acutely ill children, when possible
* Develop triage forms specifically for disaster scenarios to exclude time-consuming and irrelevant questions. The Patient Evacuation Tracking Form developed for the Seattle- King County Regional Evacuation and Patient Tracking Mutual Aid Plan is included in the Annex for your hospital’s own consideration.
  + Staffing Recommendations for Pediatrics in a Disaster

(for hospitals without significant pediatric services or staff)

General guidelines:

* Pre-identify hospital staff with specialty skills or experience with pediatric patients
* Emergency medicine, pediatrics, family medicine
* Anesthesia, ENT, pediatric surgery, trauma surgery, general surgery, orthopedics, urology, neurosurgery, thoracic surgery
* Nurses, PA’s, NPs from EDs, ORs, PACUs, ICUs, inpatient units & outpatient clinics
* Develop call-down and notification procedures for all staff identified
* Create key pediatric positions for response in a disaster event; add to your hospital’s Disaster/ Emergency Response Plan
* Physician Coordinator for Pediatric Emergency Care in a Disaster
* Nursing Coordinator for Pediatric Emergency Care in a Disaster
* Pediatric Safe Area Coordinator (Job Action Sheet in Annex)
* Pediatric Logistics Unit Leader (Job Action Sheet in Annex)
* Pediatric Services Unit Leader (Job Action Sheet in Annex)

**Training Recommendations**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Provider Level** | **Recommended Training:** | | | | |
| **ACLS** | **ATLS** | **PALS/ENPC** | **Basic Disaster Training** | **Disaster Drill including**  **Pediatric Pts** |
| Emergency Department Nurses  & Physicians | Yes | Yes | Yes | Yes | Yes |
| Pediatric Inpatient Unit Nurses & Physicians | Yes | No | Yes | Yes | Yes |
| Pediatric ICU Nurses  & Physicians | Yes | No | Yes | Yes | Yes |
| Pediatric Surge Capacity Nurses &  Physicians**\*** | Yes | No | Yes | Yes | Yes |
| Medical/Surgical ICU Nurses & Physicians plus PACU staff | Yes | No | Yes | Yes | Yes |
| Other Surgical & Medical Physicians likely to respond to  ED during disasters | Yes | Yes | Yes | Yes | Yes |

**\*** Staff designated in the hospital disaster plan to care for pediatric patients and their families when usual hospital inpatient pediatric capacity is exceeded and pediatric patients cannot be transferred

## Equipment Needs for Pediatric Emergency Patients

* **\***Calculate institution’s projected surge capacity for critical pediatric patients
* \*Consider assembling length-based color-coded bags (e.g., Broselow ™) with 1 set of color- zone-appropriate equipment in each bag. A bag would be assigned to each patient on admission and would follow him/her throughout hospital stay. Rolls of 10 bags can be stocked and/or transferred from regional store to help meet surge needs among hospitals.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type** | **Size** | **Total\*** | **Essential** |
| Ambu bags & clear masks, self-inflating (500 mL) | Infant |  | √ |
| Child |  | √ |
| Arm boards |  |  |  |
| Blood pressure cuffs | Infant |  | √ |
| Small child |  | √ |
| Chest tubes & set-up | 16F |  | √ |
| 28F |  | √ |
| Defibrillator pads | Pediatric |  | √ |
| Dosing chart, color-coded | Pediatric |  | √ |
| EKG electrodes | Neonatal |  | √ |
| Pediatric |  | √ |
| ETCO2 Detectors |  |  |  |
| ET tubes (cuffed preferable) | 2.0 – 7.5 mm |  | √ |
| Foley catheters | 8F |  | √ |
| 10F |  | √ |
| 12F |  | √ |
| Fuhrman pigtail catheters | 7F |  | √ |
| 8.5F |  | √ |
| Gastrostomy tubes (can use NG tubes PRN) | 12F |  |  |
| 14F |  |  |
| 16F |  |  |
| Infant scale |  |  | √ |
| Intraosseous needles |  |  | √ |
| Intravenous infusion pumps |  |  | √ |
| Laryngoscope blades | Macintosh 0 |  | √ |
| Macintosh 1 |  | √ |
| Macintosh 2 |  | √ |
| Miller 0 |  | √ |
| Miller 1 |  | √ |
| Miller 2 |  | √ |
| Laryngoscope handles |  |  | √ |
| LMA’s | Sizes 1,2,3 |  |  |
| Masks:  non-rebreather | Infant |  | √ |
| Child |  | √ |

### Equipment Needs (2)

|  |  |  |  |
| --- | --- | --- | --- |
| **Type** | **Size** | **Total** | **Essential** |
| Nasal cannula | Infant |  | √ |
| Child |  | √ |
| Nasogastric tubes | 6F |  | √ |
| 8F |  | √ |
| 10F |  | √ |
| 12F |  | √ |
| 14F |  | √ |
| 16F |  | √ |
| Nasopharyngeal airway | All peds sizes |  |  |
| Newborn kit/OB kit |  |  | √ |
| Oral airways | 00 |  | √ |
|  | 01 |  | √ |
| IV catheters | 18 |  |  |
|  | 20 |  | √ |
|  | 22 |  | √ |
|  | 24 |  | √ |
| Overhead warmer |  |  |  |
| Peds MDI spacers w/masks | Sm, med, lg child |  | √ |
| Oximeters |  |  | √ |
| Oxygen saturation probes | Pediatric Neonatal |  |  |
| Restraining board (Papoose) |  |  |  |
| Resuscitation tape, length- based (such as Broselow™) |  |  | √ |
| Seldinger vascular access kit (with catheter) | 4F, 5 cm |  |  |
| 5F, 5 cm |  |  |
| 5F, 8 cm |  |  |
| Semi-rigid cervical spine collars | Infant |  | √ |
| Small child |  | √ |
| Child |  | √ |
| Suction catheters | 5F |  | √ |
|  | 8F |  | √ |
| Syringes | 1, 3, 5 & 10 cc |  | √ |
| 60 mL, cath tip |  |  |
| Tracheostomy tubes | 00 – 6 |  | √ |

**Pharmacy Needs for Pediatric Emergency Patients**

##### General Guidelines:

###### Recommend acquisition of a pediatric pharmacy disaster cart (length-based, color-coded system, such as Broselow™)

* 1. Establish procedures for maintenance of cart.
  2. Consider establishing patient-specific weight-based code med sheet with computer-calculated code med doses to be placed at foot of every pediatric bed in day-to-day operations.
  3. Maintain 72-hour supply of essential pharmaceuticals.
  4. Estimate supply for treatment or post-exposure prophylaxis(PEP) of biologic agents at your facility:

**Daily census of pediatric patients**

**# of courses of treatment =** *plus*

**Estimate of surge of pediatric disaster victims**

(*plus)*

(Consider adding pediatric family members of hospital staff)

###### Provide for storage, monthly inspection and re-supply of inventory.

* 1. Maintain list on the cart of sources of additional drugs, including network affiliations (WATrac), local pharmacies, drug companies.
  2. Identify unit leader responsible for distribution of meds in case of disaster.
  3. Develop system to stop nonessential use of antibiotics until supply arrives.
  4. Regularly test pharmacy during drills.

Essential Pediatric Pharmacy Inventory

|  |  |  |
| --- | --- | --- |
| **Emergency Meds** | **Dose** | |
| Albuterol 2.5mg/3mL | <1 yr: | 0.05 - 0.15 mg/kg q4h PRN |
| 1 - 5 yr: | 1.25 - 2.5 mg/kg q4h PRN |
| 5 -12 yr: | 2.5 mg/dose q4h PRN |
| >12 yr: | 2.5 - 5 mg/dose q4h PRN |
| Albuterol MDI with mask and spacer | 1-2 puffs q 4-6 h or more often PRN with monitoring | |
| Atropine sulfate 1mg/10 mL | 0.02 mg/kg IV/IO/IM (min. 0.1 mg) Max: Child = 0.5 mg; Adolescent = 1 mg | |
| Calcium chloride 10% (1g/10 mL) | 20 mg/kg (0.2 ml/kg) slow IV/IO (max 1 g) *Use IV with extreme caution: extravasation may lead to necrosis.* | |
| Dexamethasone 4 mg/mL | 0.5 - 2 mg/kg/day IV/IM divided q6h (max 16 mg/day) | |
| Dextrose 10% (5g/ 50 mL) | 5 - 10 ml/ kg bolus IV/IO PRN | |
| Diazepam 10mg/ 2 mL | 0.05 - 0.3 mg/kg IV (max 10 mg) | |
| Diazepam – rectal gel 10 & 20 mg applicators | 2 – 5 yrs: 0.5 mg/kg | |
| 6 – 11 yrs: 0.3 mg/kg | |
| 12 yrs: | 0.2 mg/kg |
| Diphenhydramine 50 mg/mL | 1.25 mg/kg IV q 6h (max 50 mg/dose) | |
| Dopamine 200mg/5 mL | 2 – 20 microgram/kg/minute IV | |
| Epinephrine 1:10,000 (0.1mg/mL) | 0.01 mg/kg IV/IO q 3-5min (max 1 mg/dose) | |
| Epinephrine infusion | 0.05 – 1 mcg/kg/min | |
| Epinephrine, racemic 2.25% | < 4 yrs: 0.05 ml/kg/dose (max 0.5 ml) diluted to 3 ml with NS via neb q 1-2 hr PRN   4 yrs: 0.5 ml/dose via neb q 3-4 hr PRN | |
| Etomidate 2 mg/mL | * 10 yrs: 0.3 mg/kg IV over 30-60 sec | |
| Fentanyl 50 micrograms/mL | 1-2 mcg /kg/dose IV/IM q 30-60 min PRN | |
| Fosphenytoin 50 mg PE/1mL | 15 - 20 mg PE/kg IV loading dose | |
| Furosemide 10 mg/ mL | 0.5 – 2 mg/kg IV | |
| Insulin infusion | 0.1 U/kg/hr | |
| Ketamine 10 mg/mL | 4 – 6 mg/kg IM or 1-2 mg/kg IV over ≥ 60 seconds | |
| Lidocaine 2% (5mL) | Loading: 1 mg/kg IV/IO | |
| Lorazepam 2 mg/mL injection  2 mg/mL oral solution | 0.05 – 0.1 mg/kg/dose q 10-15 min PRN PO/IV (max: 2 mg/dose) | |
| Mannitol 25% (12.5g/ 50 ml) | 0.25 - 1 g/kg/dose IV over 30 minutes | |
| Midazolam 1mg/mL | 0.1 – 0.2 mg/kg IV/ IM (max 10 mg) | |
| Ondansetron tabs 4 mg & 8 mg (orally disintegrating tablet) | 4-11 yrs: 4 mg  ≥12 yrs and adults: 8 mg | |
| Phenobarbital | 15-20 mg/kg/dose IV; may add 5 mg/kg/dose q 15-  30 min to Max 30 mg/kg | |
| Phenytoin 50 mg/mL | 15 - 20 mg/kg IV loading dose | |
| Prednisone 5 mg/5 mL syrup | 2 mg/kg/day PO divided bid (max 60 mg/day) | |
| Rocuronium 10 mg/mL | 1 mg/kg/dose IV x 1, then 0.1 - 0.2 mg/kg/dose  q 20-30 min PRN | |
| Silver Sulfadiazine cream 1% | Apply thinly to entire affected area daily | |
| Succinylcholine 20 mg/mL | IV: 1-2 mg/kg/dose x 1  IM: 3-4 mg/kg/dose x 1 (max 150 mg/dose) | |

Essential Pediatric Pharmacy Inventory (2)

Maintenance fluids

D5W 0.2%NS + 20 mEq/L KCl

Analgesics

Acetaminophen oral solution Ibuprofen 100mg/ 5 mL Morphine 1 mg/mL injection Morphine 10 mg/mL oral sol **Antibiotics**

Ceftriaxone 0.5 and 2 g injection

Gentamycin 10 mg/mL and 40 mg/mL Piperacillin/Tazobactam 2 g/0.25g inj. Vancomycin 1 and 5 g injection **Pandemic influenza prophylaxis** Oseltamivir 12 mg/mL oral susp

Pandemic influenza therapy

Oseltamivir 12 mg/mL oral susp

Anthrax, post-exposure (PEP)

Ciprofloxacin 250 mg/ 5 mL OR Doxycycline

Nerve Agents

Pralidoxime 1 g/ 20 mL

*plus*

Atropine 1 mg/10 mL

OR Mark I Autoinjector

Plague, post-exposure (PEP)

Doxycycline

OR Ciprofloxacin 250mg/5 mL

**Rate**

4 mL/kg/ hr for 1st 10 kg of weight *plus* 2 mL/kg/ hr for 2nd 10 kg of weight *plus* 1 mL/Kg/hr for each additional kg

Dose

10 - 15 mg/kg q 4h PO (max 1000 mg/dose) 5 - 10 mg/kg q 6h PO (max 800 mg/dose)

* 1. – 0.2 mg/kg IM/IV/SC q 2-4h
  2. – 0.5 mg/kg q 4-6h PO PRN

50 mg/kg IM/IV q 12 hr (max 2 g/dose)

2.5 mg/kg IM/IV q 8 hr (follow levels)

100 mg/kg/dose IV q 6-8 hr (max 18 g/day)

10 - 15 mg/kg/dose IV q 6 hr (max 1 g/dose)

< 3 mo old, not recommended unless dire situation 3 – 9 mo old, 3.0 mg/kg once daily

9 –11 mo old, 3.5 mg/kg once daily

* 1 yr,  15 kg: 30 mg once daily ( 2.5 ml)
* 15 kg to 23 kg: 45 mg once daily ( 3.8 ml)
* 23 kg to 40 kg: 60 mg once daily ( 5 ml)
  + 40 kg: 75 mg once daily ( 6.2 ml)

0 – 9 mo old, 3.0 mg/kg bid

1. –11 mo old, 3.5 mg/kg/bid

* 1 yr,  15 kg: 30 mg bid ( 2.5 ml)
* 15 kg to 23 kg: 45 mg bid ( 3.8 ml)
* 23 kg to 40 kg: 60 mg bid ( 5 ml)
  + 40 kg: 75 mg bid ( 6.2 ml)

1. -15 mg/kg PO q 12h (max 1 g/day) If 45 kg, give 100 mg PO bid

If < 45 kg, give 2.2 mg/kg PO bid

25 – 50 mg/kg IV/IM (max: 1g IV; 2 g IM) Repeat in 30-60 min, then q 1h x 1-2 PRN

* 1. – 0.1 mg /kg IV/IO/IM (min 0.1 mg, max 5 mg)

**In children  10 yr**., admin in 2 separate sites

If 45 kg, give 100 mg PO bid

If <45 kg, give 2.2 mg/kg PO bid 20 mg/kg PO bid (max 1 g/day)

### Pediatric Dietary Needs

* + 1. Maintain a 5-day food supply for pediatric patients for use during an emergency.
    2. Maintain Memoranda of Understanding (MOUs) with nearby stores for immediate delivery of groceries, pharmacies and medical supplies.
    3. Sample pediatric menus are included in Annex.

|  |  |  |  |
| --- | --- | --- | --- |
| **PEDIATRIC DIETARY RECOMMENDATIONS** | | | |
| Healthy Children | | | |
| **0-6 months** | **6 months to 1 year** | **1 to2 years** | **2 years and above** |
| Breast-fed or formula-fed by bottle only.  **Comments:** Some breast-fed children may not immediately take bottle-feeding.  **Continue to feed; eventually the child will feed from the bottle.**  **Recommendation:** Ready-to-feed formula is preferred since it is immediately ready for use and requires no refrigeration or preparation.  However, powdered baby formula may be used as well.  Powdered formula will have a longer shelf life. | **6-9 months** – baby cereal, jarred baby food or mashed table food is appropriate – along with formula or breast milk  **9-12 months** – soft, bite sized pieces of foods, i.e. vegetables, mashed potatoes, and meats – along with formula or breast milk | This age group eats table food. Young children will need soft bite-sized foods  – along with milk.  Avoid foods that can cause choking such as hot dogs, grapes, chunks of meat unless cut in pea size pieces  **Hydration:** Water Pedialyte | This age group eats table food. Young children will need finger foods – along with milk.  Avoid foods that can cause choking such as hot dogs, grapes, for youngest children.  **Hydration:** Water Pedialyte |

|  |
| --- |
| **PEDIATRIC DIETARY RECOMMENDATIONS** |
| Children with Special Needs or Disabilities |
| **Patients with feeding tubes:**   * Nasogastric (N/G) and Orogastric (O/G)   + used for acute feeding issues, gastric decompression, delivery of oral medications and activated charcoal * Gastrostomy (G/T)   + used in patients with chronic feeding challenges   + use 60cc syringe with catheter tip   + administer by bolus or continuous feed pump   **Fluids appropriate for G/T tube feedings:**   * **Infants (0-12 months):** Infant formula * **12 months and older children:**   + Resource Just for Kids   + PediaSure   + Nutren Jr. * **Adolescents**: an adult enteral product may be appropriate   **Hydration:** Tap or bottled water  **Comments:**   * The same feeding pump used for adults can also be used to feed children * Use water to clean the area where feeding tube is inserted. * Change feeding bags on regular schedule and clean prior to adding more formula. |
| Diabetic Children |
| The nutritional needs will be determined by patient’s body weight and insulin requirements.  **Recommendation:** May require between meal snacks to control blood glucose. |

### Pediatric Security Issues

1. Develop a Pediatric Tracking System that addresses both the accompanied and unaccompanied child (see “Child ID Form” on page 17).
2. Develop a protocol to rapidly identify and protect displaced children. Routine use of such a protocol in day-to-day operations will increase its efficient and effective use in a disaster scenario.
3. Create a Child ID document to record any key identifying information about children or use in later tracking or reunion with caregivers.
4. Create Pediatric Safe Areas that will serve as a holding area for uninjured, displaced or released children awaiting adult caregivers. A Pediatric Safe Area Checklist has been provided in the Annex to assist in the establishment of such areas.
5. Identify a Pediatric Safe Area (PSA) Coordinator who will assume the responsibility of setting up and supervising the pediatric safe area in the event of a disaster. Consider using non-medical personnel such as social work, child life or a qualified volunteer. Included in the Annex is a Sample Job Action Sheet which outlines the PSA Coordinator position.
6. Create and use a Pediatric Safe Area registry sheet to document activity, such as transfer status, location, and final disposition, regarding the child. Example is included in Annex.

Resources included in Annex:

Pediatric Safe Area Coordinator Job Action Sheet Pediatric Safe Area Checklist

Pediatric Safe Area Registry Sheet Pediatric Evacuation Tracking Form

## Tracking Protocol

### Unaccompanied Child or Child with Lone Adult Patient

This form should be filled out for every child who is either: an unaccompanied child OR

**a minor (< 18 yrs) who accompanies a lone adult who is a patient**.

* Fill out the “Child ID Form.”
* If the child is a minor or a patient who arrives with an adult who is a patient, place identical identification bands on both the child and the adult with the following information:
  + Name of child with DOB
  + “P” (patient) or “V” (visitor)
  + Date
  + Name of adult with DOB
  + “P” and location

If child is unaccompanied and < 18 years

* Fill out “Child ID Form,” if possible. Include any information from the child or anyone who brought the child in, such as address or where found, circumstances, description of clothing, etc.
* Place ID band on child that includes name, DOB, “P” or “V” status and date
* Take digital photograph, print photo, write ID info on back and attach to form
* Catalogue by any information obtained
* Report child immediately to:
* law enforcement in local jurisdiction OR
* when activated, the regional Family Assistance Center (FAC)\*
* If the child is cleared medically, the child should be taken to the pre-determined Pediatric Safe Area for further disposition.

\*FAC will report child to National Center for Missing and Exploited Children (NCMEC), according to established protocol.

* Child is unaccompanied

**Child ID Form**

* **Child is patient with lone adult who is a patient**
* **Child is visitor with lone adult who is a patient**

Date

**Name of child**:

Age:

DOB

Male Female

Address, if available Phone number

If unaccompanied minor, circumstances (who, where, when, clothing, etc.)

Eye color Hair color Distinguishing marks

**Name of adult** DOB

Male Female Relationship to child

Accompanying adult treated for illness or injury? Yes No

Admitted? No Yes Where?

Child was treated for illness or injury? Yes No

Describe

Admitted? No Yes Where?

If “No,” disposition (include Safe Area):

Identification bands placed

* Child (initial when completed)
* Adult (initial when completed)

Unaccompanied minor

3-17-10

PHOTO

* Photographed and catalogued
* Reported to law enforcement or FAC

(initial when completed) (initial when completed)

### Infection Control in a Communicable Disease Emergency

##### Point of Entry Measures

* Place respiratory etiquette signs prominently in entry and waiting areas
* Instruct screening, triage and reception staff regarding disease symptoms, mode of transmission and exposure control measures as advised by Public Health
* Screen to identify symptomatic patients at point of entry to implement exposure control measures
* Instruct and supervise patients and caregivers in respiratory etiquette & hand hygiene and other infection and exposure control measures
* Provide adequate supplies of tissues and an easy way of disposing used tissues
* Mask symptomatic adults and, when feasible, symptomatic children (usually ≥ age 3)
* Separate persons with symptoms from those without (exception: adult caregivers who may need to remain with ill children for care and/or comfort)
* Separate contacts of ill people from those who have not been exposed
* Ideal separation management: symptomatic individual in single room
* Minimal management: symptomatic individuals, masked and separated by 3+ feet
* When masking is not possible, emphasize importance of respiratory etiquette and hand hygiene.
* Cohort symptomatic individuals (masked and unmasked) in an area which has a door that can be closed and which is large enough to permit social distancing
  + Ideally include symptomatic unmasked children after diagnosis is confirmed
  + If confirmation is not possible, make decisions according to symptoms and epidemiology
* Conduct contact identification procedures among persons accompanying an ill individual
* Instruct, observe and supervise to ensure appropriate infection and exposure control measures are being followed by cases, contacts, personnel and caregivers

Management of Asymptomatic Exposed Children and Adults

* Issue hospital identification bands to all children; include parent/caregiver information and contact status
* Cohort asymptomatic children and asymptomatic caregivers who have experienced the same exposure
* Keep group size as small as is practical and promote social distancing (3+ feet apart)
* Create a log to list all persons, including staff, who enter the cohort setting
* Include date, name and brief ID info, time in/time out, information about further exposures within the cohort, including date, time, duration of exposure and name of person with symptoms
* Promote frequent and thorough hand washing with soap and water or use of alcohol-based hand sanitizer
* Discourage sharing of toys unless washed and disinfected first
* Establish routine for cleaning environmental surfaces, including transport equipment

Procedures for Inpatient Units

* Maintain a log of personnel assigned to persons who are ill.
* Monitor personnel for symptom onset.
* Increase frequency of environmental cleaning throughout unit.
* Develop a visiting protocol, including limiting duration and number of visitors and PPE

## Hospital Family Information and Support Center (FISC)

##### Primary functions:

* 1. Provide accurate information to family members through statements issued by the hospital’s patient information officer:
     1. Facilitate family access to regional Family Assistance Center’s (FAC’s) call center
     2. Coordinate communication with local law enforcement and FAC
  2. Provide psychological first aid to distraught families
  3. Provide escort and “comfort” services to families
  4. Provide temporary childcare for well children of the injured or family members who need to assist the injured.
  5. Assist with patient location and reunification of family within the hospital.
  6. Assist in contacting family members to arrange care of children present at hospital.
  7. Assist in making in-place shelter arrangements or community placement of children for those who do not have a safe place to be or a family member who can care for them.
  8. Provide communications needs for families (phones, e-mail)
  9. Protect families from intrusion by media or curious bystanders
  10. Enable medical staff to concentrate on treatment of casualties

Families need to be provided with the most up to date information available in a supportive and safe environment. Upon arrival to the FISC, families are logged in either via an electronic database or sign-in book. Registered families are reviewed periodically to update with information coming into the FISC. Assign a social worker, or other support staff, to families that are identified as exhibiting overt psychological upset or need to be given bad news.

##### Ideal set-up of FISC

* Large reception area with conveniently located restroom facilities
* Information desk with message center and phone, fax and computer connections
* Photograph/identification room with limited access (close relatives only)
* Private consultation rooms with table, chairs, telephone, tissues, trash can.
* Pediatric Safe Area (see Pediatric Security, page 5)

##### Identification of identified or unidentified victims/ family members

* Personal details and pictures of surviving victims are sent to the FISC electronically or via fax or runners from the ED, ICU and EMS
* Information is included on all unaccompanied children, both the uninjured and those receiving medical treatment
* Information on deceased victims should be sent to the regional Family Assistance Center and may require involvement of the King County Medical Examiner’s Office.
* Adults coming to the hospital to claim children must show I.D.; ideally, they should bring a picture which includes the adult with the child, such as a family photograph.
* Adult family members of victims not reported to the hospital’s FISC should be referred to the regional Family Assistance Center (FAC) for more information.

Recommended FISC staffing

* Coordinator
* Patient Information Officer
* Liaison to regional Family Assistance Center (FAC)
* Runners
* Trained and pre-screened volunteers
* Security
* Translators as needed
* Professional staff (spiritual care, social services

## Legal Considerations

Having hospital policies and procedures in place prior to an event will eliminate a large amount of confusion and many questions. Some decisions will depend on directives issued by the public health department and other government officials, including changes in standards of care. The following are legal questions and issues that may arise during a disaster and should be discussed and clarified to the extent possible in hospital planning:

* For unaccompanied children during a disaster, consent is not needed to treat for a life or limb-threatening situation. Will parental consent be needed to treat a child victim with minor injuries or with psychological injuries?
* Is parental consent required to decontaminate an unaccompanied child? What if a child is asymptomatic? What if a child is refusing treatment?
* What medical or social information can or should be released and to whom during a disaster?
* Check HIPAA rules and your legal counsel concerning the unidentified patient locator protocols, such as posting photographs of unidentified children.
* Who can children be released to and, if not the parent or caregiver, what permission or information is needed? What is your protocol for releasing children if no legal guardian or parent can be found or if no permission document is provided?

### Psychological First Aid for Disaster Survivors

##### Re-create sense of safety

* Provide for basic needs (food, clothing, medical care)
* Ensure that survivors are safe and protected from reminders of the event
* Protect them from on-lookers and the media
* Help them establish a “personal space” and preserve privacy and modesty

##### Encourage social support

* Help survivors connect with family and friends (most urgently, children with parents)
* Educate family and friends about survivors’ normal reactions and how they can help

##### Re-establish sense of efficacy

* Give survivors accurate simple information about plans and events
* Allow survivors to discuss events and feelings, but do not probe
* Encourage them to re-establish normal routines and roles when possible
* Help resolve practical problems, such as getting transportation or relief vouchers
* Discuss self-care and strategies to reduce anxiety, such as grounding and relaxation techniques
* Encourage survivors to support and assist others

**Some children are more likely to have emotional reactions to the events** (See Annex for “After a Disaster**:** Possible Reactions of Children”)

* Children who witnessed the event firsthand or whose parent, relative of friend was killed or injured
* Children who are displaced from their home or schools
* Children with a past history of emotional problems
* Children with a past history of trauma, either as victim or witness to violence or abuse
* Children with an adult in their life who is having difficulty with their emotions, a witness to violence or victim of domestic violence

### Helpful hints to assist children during a disaster

For children under age 5:

* Ask what makes them feel better
* Give plenty of hugs and physical reassurance

For children older than age 5:

* Don’t be afraid to ask them what is on their mind and answer their questions honestly
* Talk to them about the news and any adult conversations they have heard
* Make sure they have opportunities to talk with peers if possible
* Set gentle but firm limits for acting out behavior
* Listen to child’s repeated retelling of the event

### Pediatric Transport Issues

Within the hospital

* Equipment:
* Children > 8-10 years old – adult stretchers may be appropriate.
* Smaller children – crib or additional personnel with padded adult stretcher
* Personnel
* Parents or adult caregivers should stay with children.
* If none, appropriate personnel must be identified to supervise pediatric patients
  + Children < 6 yrs – continuous 1:1 supervision, unless in crib
  + Children  6 yrs – assess ability to follow safety rules while on stretcher
  + A child separated from other children requires constant 1:1 observation

From hospital to other facilities

Hospitals should consider alternatives to ambulances for safe pediatric transfers in a disaster.

1. Stable patients:
   1. Arrange for car seats (see options in table below)
      1. Donations
      2. Purchases
      3. Identify local sources to tap as needed
      4. Conduct just-in-time survey of employees re: car seats in their cars
   2. Transport vehicles
      1. Cars, vans, city or private buses with car seats, as indicated
      2. School buses for children  5 yrs who can sit up
      3. Driver must have cell phone or radio to communicate with hospital
      4. Appropriate medical personnel must accompany patients
      5. Mental health or social service personnel should ideally accompany
2. Unstable or potentially unstable patients:
   1. Appropriate transport vehicles
      1. EMT or Paramedic ambulance with:
         1. Staff skilled in pediatric airway and resuscitation
         2. Equipment appropriate for age and acuity of patient
         3. Ongoing consultation with a pediatric expert
      2. Paramedic ambulance without hospital staff for less critical patients
      3. Specialty pediatric transport teams from referral pediatric institutions

|  |  |  |  |
| --- | --- | --- | --- |
| **Appropriate Use and Type of Car Seats** | | | |
|  | **Infants** | **Toddler** | **Young Children** |
| **Age & Weight** | Up to 1 year old AND 20 lb. or less. | Over 1 year to 4 years old AND over 20 lb. | Ages 4-8  AND over 40 lb. |
| **Seat Type** | Infant only or rear-facing convertible | Convertible / Forward- facing | Belt positioning booster seat |
| **Seat Positioning** | Rear-facing only | Forward-facing | Forward-facing |
| **Cautions:** | All children age 12 and under should ride in the back seat. | | |

### Pediatric Surge: General guidelines

1. Activate hospital external disaster plan
2. ID and notify healthcare workers with pediatric clinical expertise
3. ID pediatric equipment, drug dosing guidelines, ventilators, availability of operating rooms and pediatric ICU beds
4. Prepare for stabilization and transfer as indicated.
5. Contact Hospital Control to determine hospitals with pediatric capability/capacity for possible transfer.
6. Set up family assistance area and separate area for media
7. Confirm hospital’s surge capacity for pediatric patients (number and severity)
8. Keep minimum of 5 cribs, port-a-cribs or playpens in storage.
   * If adult beds are only option, use beds with side rails, set a lowest possible height and with electric controls unplugged.
9. Decontaminate patients upon arrival, as indicated.
10. Keep appropriate-sized airway supplies readily available for each patient.
11. Plan for rush of media and anxious parents/family members (4-5 visitors/patient), including for security
12. Establish a Pediatric Safe Area (see Page 15).

##### EMERGENCY DEPARTMENT

Red-tagged patients (critical/unstable)

* Place in the most acute beds of the pediatric or, as necessary, of adult areas of the ED
* Management: ED attendings; transfer to PICU or pediatric ward attendings, if available
* Alert surgery (pediatric, when available) or Trauma Team
* Place all other surgical specialties on standby

Yellow-tagged patients (moderately injured or ill/potentially unstable)

* Place in non-acute beds of pediatric area; overflow to adult non-acute beds in ED
* Reevaluate frequently and treat and assign disposition in a timely manner

Green-tagged patients (minor or non-injured/stable)

* Triage to waiting room, other large waiting area or clinic (if available)
* Reevaluate frequently and discharge ASAP to an appropriately identified adult

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Critical/Unstable** | **Potentially Unstable** | **Stable** |
| **Color Triage** | **Red** | **Yellow** | **Green** |
| **Clinical Care Area** | **Resuscitation** Area | **Triage** or other designated area | **Fast Track** or other designated area |

##### ASSIGNMENT OF IN-PATIENT BED SPACE

1. Hospitals with a PICU

* Admit the most critical cases and/or youngest victims to PICU
* Manage overflow patients in monitored beds on ward or adult medical or surgical ICUs.
* Manage post-op patients in PACU.
* Admit moderately injured or ill patients to pediatric ward.
* As more space is needed, add 1 bed per room, if possible.
* Consider cohorting older pediatric patients on adult wards. Room sharing, if required should be with like-aged pediatric patients. Unaccompanied minors should only share a room with another unaccompanied pediatric patient.

1. Hospitals with pediatric beds but no PICU

* Transfer critical care pediatric patients to hospital with PICU as soon as possible.
* While awaiting transfer, Pediatric Staff can manage critical patients (in consultation with ED, anesthesia and/or adult critical care staff as needed):
  + in post-op recovery beds
  + in adult medical or surgical ICUs
  + in the emergency department
  + in monitored beds on the pediatric ward with pediatric RNs
* Manage moderately injured or ill children on pediatric ward (add beds as indicated).
* Consider cohorting oldest pediatric patients on adult wards. Room sharing, if required should be with like-aged pediatric patients. Unaccompanied minors should only share a room with another unaccompanied pediatric patient.

1. Hospitals without a Pediatric Service

* Transfer critical care pediatric patients to a hospital that can provide a higher level of care as soon as possible or when space is available**.**
* While awaiting transfer, ED, anesthesia, family medicine and/or adult critical care staff can manage critical patients in cooperation with pediatrics and/or pediatric critical care by phone consult:
  + in post-op recovery beds
  + in adult medical or surgical ICUs
  + in the emergency department

Non-critical patients can be admitted to adult wards if transfer is delayed or unavailable (cohort pediatric patients, whenever possible).

**Hospital Decontamination and the Pediatric Patient**

25



**Non-ambulatory**

Situation: Children arrive at the hospital requiring decontamination.

Assessed by Visual Inspection Officer

**Critical injuries are decontaminated first.**

(Delay radiation decon if delayed treatment will harm patient)

*Children and their families (parents or caregivers) should not be separated unless critical medical issues take priority*

**DECONTAMINATION OF THE PEDIATRIC PATIENT**

* Risk of hypothermia increases proportionally in smaller, younger children when the water temperature in the decontamination shower is below 98°F.
* The smaller the child, the bigger the problems managing hypothermia, airway, separation from family and effective decontamination.

**Ambulatory**

Preschool (2 to 8 yrs old)

School Age (8 to 18 yrs old)

Estimate child’s age by visual inspection

* Treat or prevent hypothermia (towels, gowns, warming blankets)
* Immediately give a unique identification number on a wristband (or equivalent)
* Triage to an appropriate area for further medical evaluation

**Please note:** Children and their families (parents or caregivers) should not be separated unless critical medical issues take priority 25

* assist disrobing (child’s caregiver or “hot zone” personnel)
* direct supervision of decon
* monitor airway
* escort through the shower by either caregiver or “hot zone” personnel
* disrobe by child’s caregiver and “hot zone” personnel
* place on a stretcher or restraining device
* escort through the decon shower by “hot zone” personnel and caregiver
* direct supervision of decon (of caregiver, too)
* monitor airway

*(Caregiver should not carry the child due to the risk of accidental trauma resulting from a fall or from dropping the child while in the shower.)*

* disrobe w/o assistance
* respect modesty (may leave on underwear)
* respect privacy
* child decons him/herself, but goes through decon shower in succession with caregiver, parent, or
* disrobe by child’s caregiver and “hot zone” personnel
* place on a stretcher or restraining device
* escort through the decon shower by “hot zone” personnel and caregiver
* direct supervision of decon (of caregiver, too)
* monitor airway

Infants and Toddlers (less than 2 yrs old)

## Pediatric Hospital-Based Triage

Step 1: Is decontamination required?

###### **YES,** Decontamination IS required:

* 1. Assessment and triage by Visual Inspection Officer 1 outside facility
  2. Decontamination procedure outside
  3. Reassessment and triage by Visual Inspection Officer 2 inside facility

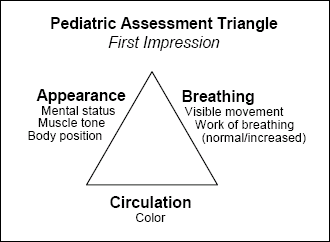
###### **NO,** Decontamination is NOT required:

1. Assessment by Visual Inspection Officer 2
2. Triage to appropriate clinical care area

Step 2: Visual inspection triage via Pediatric Assessment Triangle (PAT)

**Appearance Triage**

|  |
| --- |
| **Limp** |
| **Apathetic** |
| **Inconsolable** |
| **Vacant gaze** |
| **Weak or hoarse cry** |
| **Uncomfortable** |
| **Strong movement & cry, eyes fix &**  **follow, consolable** |

**Circulation Triage**

|  |
| --- |
| **Pallid or mottled** |
| **Cyanotic** |
| **Normal** |
| **Pink, normal** |

YES

**Resuscitation Area Critical/ Unstable**

Absent airway, breathing or circulation

Compromised airway, moderate to severe respiratory symptoms, compromised circulation, unresponsive or responsive to pain only

**Airway/Breathing Triage**

|  |
| --- |
| **Central cyanosis** |
| **Absent or labored** |
| **Obstructed** |
| **Excess secretions** |
| **Normal: pink patient** |

NO

NO

YES

Normal airway, breathing, circulation and mental status No significant mechanism of injury or illness

**Fast Track Area Stable**

Normal airway, mild respiratory symptoms, normal circulation and/or significant mechanism of injury or illness

Altered appearance or behavior or severe pain

All children ≤ 5 yr and unaccompanied children ≤ 8 yr Children with special needs

YES

Yes Yes

**Triage Area Potentially Unstable**

### Pediatric Assessment Triangle Criteria

**Appearance**

|  |  |  |
| --- | --- | --- |
| **Assessment** | **Unstable or Potentially Unstable** | **Stable** |
| **Tone** | Limp | Vigorous movement with good muscle tone |
| **Interactivity** | Apathetic; will not reach for a toy or respond to people, objects and sounds | Will reach for a toy; is alert and attentive to surroundings |
| **Consolability** | Agitated and crying; cannot be comforted | Responds to soothing |
| **Look/Gaze** | Vacant stare; will not focus on face or on an object | Eyes will fix on & follow your face or on a moving object |
| **Speech/Cry** | Weak, muffled or hoarse voice or cry | Strong voice or cry |

**Breathing**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment** | **Critical /Unstable** | **Potentially Unstable** | **Stable** |
| **Airway** | Complete or partially obstructed OR significant blood or secretions | Patient with minimal secretions | Patent |
| **Work of breathing** | Absent or labored with periods of weakness | Normal | Normal |
| **Respiratory rate** | Apnea, bradypnea, tachypnea, irregular | Occasionally increased | Normal |
| **Breath sounds** | Absent or decreased Grunting, wheezing, stridor | Normal or slight wheezing | Normal |
| **Central skin color** | Pallid, mottled, cyanotic | Pink | Pink |
| **Inspection** | Suprasternal, supraclavicular or intracostal retractions | Suprasternal, supraclavicular or intracostal retractions | Normal |
| **Muscle tone/ body position** | Hypotonia or atony | Normal tone, but may assume tripod position | Normal |
| **Mental status** | Extreme agitation or reduced responsiveness | Alert, agitated or combative | Normal |
| **Pulse oximetry** | Less than 85% | 85% or higher | 95% or higher |

**Pediatric Assessment Triangle Criteria (2)**

**Circulation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment** | **Critical /Unstable** | **Potentially unstable** | **Stable** |
| **Heart rate** | Tachycardia or bradycardia | Normal | Normal |
| **Pulse strength** | Weak central pulse, absent or weak peripheral pulse | Normal | Normal |
| **Capillary refill** | >3 to 5 seconds | <2-3 seconds | <2-3 seconds |
| **BP** | Hypotensive | Normal | Normal |
| **Skin** | Pallid, mottled, or cyanotic; cool | Normal | Normal |

**Average Respiratory Rate and Heart Rate by Age\***

|  |  |  |
| --- | --- | --- |
| Age (years) | Respiration Rate (per minute) | Heart Rate (per minute) |
| Infant birth to 1 year | 30 – 60 | 100 – 160 |
| Toddler 1 to 3 years | 24 – 40 | 90 – 150 |
| Preschooler 3 to 6 years | 22 – 34 | 80 – 140 |
| School aged 6 to 12 years | 18 -30 | 70 – 120 |
| Adolescent 12 to 18 years | 12 - 16 | 60 - 100 |

* Pulse and respiratory rates may be somewhat lower for a child who is sleeping and higher for a child with fever.

**RED**

**Resuscitation Area**

##### General:

###### Patients are classified as Critical/Unstable by either the Visual Inspection Officer(s) or Triage.

* + Resuscitation personnel should be trained in evaluation and management of critical pediatric patients.
  + There will be a designated Unit leader in this area.
  + A more detailed history and physical needs to be obtained.
  + Once stabilized, the patient is sent to ED Treatment and Holding Area (Yellow) for continued care and management. The decision to send the patient is based on repeated assessment. In general, these patients do not require additional critical care and/or resuscitation.

Reassessment criteria include the following:

1. Breathing
2. Circulation
3. Appearance
4. Mental Status
5. Laboratory analysis, as indicated
6. Radiological studies, as indicated
   * In some cases, some patient will be sent to areas for Definitive Management. These areas include, but are not limited to, the Operating Room and the Pediatric Intensive Care Unit.
   * Patients who die will be sent to the area designated as the Morgue.

**YELLOW**

**Triage Area**

**General:**

* + Patients are classified as Potentially Unstable by the Visual Inspection Officer(s).
  + Triage personnel should be trained in evaluation and management of pediatric patients.
  + There will be a designated Unit Leader in this area.
  + A more detailed history and physical needs to be obtained.
  + The assessment will include a more detailed history and a “hands on” physical exam with the focus on detecting signs and symptoms specific to the suspected injury or illness. This reassessment is necessary to detect any change in clinical status since initial triage by visual assessment and to determine a treatment plan.

Reassessment criteria include:

1. Breathing
2. Circulation
3. Appearance
4. Mental Status
5. Laboratory analysis as indicated
6. Radiological studies as indicated
   * Based on the reassessment, the patient will be sent to the Resuscitation Area, ED Treatment and Holding Area/ Urgent Treatment, Fast Track or Minor Treatment Area or for Definitive Management through surgery or intensive care.

**YELLOW**

**ED Treatment and Holding Area**

**General:**

* + Patients placed in this area are receiving definitive medical care and/or observation in the ED.
  + These patients will be admitted for Definitive Management or discharged to Home, when appropriate.
  + In cases where the patient’s clinical status deteriorates, the patient will be sent to the Resuscitation Area.

**GREEN**

**Fast Track or Minor Treatment Area**

**General:**

* + Patients are classified as stable by either the Visual Inspection Officer(s) or the Triage Area.
  + Fast Track personnel should be trained in evaluation and management of pediatric patients.
  + There will be a designated Unit Leader in this area.
  + A more detailed history and physical needs to be obtained.
  + The assessment will include a more detailed history and a “hands on” physical exam with the focus on detecting signs and symptoms specific to the suspected injury or illness. This reassessment is necessary to detect any change in clinical status since initial triage by visual assessment and to determine a treatment plan.

Reassessment criteria include:

1. Breathing
2. Circulation
3. Appearance
4. Mental Status
5. Laboratory analysis as indicated
6. Radiological studies, as indicated
   * Based on this examination, the patients will be sent to ED Treatment and Holding Area, Definitive Management or discharged Home, as indicated.
   * Patients waiting for assessment or treatment will be monitored at regular intervals using criteria from the Pediatric Assessment Triangle.

**Pediatric Services Unit Leader (Job Action Sheet)**

You report to: (Operations Chief) Command Center location Phone number

**MISSION**: To ensure that the pediatric treatment and holding areas are properly assigned, equipped, and staffed during an emergency

IMMEDIATE:

Read this entire job action sheet

Obtain briefing from Unit Leader

Gather external information from Treatment Area Sup/ED Charge Nurse regarding:

Number of expected pediatric patients and their conditions

Whether decontamination is indicated

Expected time of patient arrival

Current total number of ED patients

Determine number of available pediatric/crib beds [in-patient] and report to Operations Chief for planning purposes

Determine on-site pediatric qualified staff members

Designate triage Visual Inspection Officers (1 and 2 if decontamination is indicated)

Determine additional staff needed based on expected patient volume

Alert Discharge Unit Leader to institute early discharge/transfer of patients

Initiate Pediatric Response Team as per plan:

Predetermined Physicians (Pediatric/Family Practice/ Staff/ Community

Predetermined Nurses (with pediatric experience and/or PALS/ENPC certification)

Predetermined ancillary technicians with pediatric experience and others

Determine need for opening of a Pediatric Safe Area

Assign Pediatric Safe Area Coordinator

Communicate with Operations Chief to assure coordination of non-pediatric ancillary/support personnel as per the disaster plan

Assure preparation of a pre-designated Pediatric Disaster Care Areas:

Clear area and designate each specific area per plan and based on expected casualties

Assure support personnel are assigned to each area

Assure delivery of medical and non-medical pediatric equipment

Assure set-up of pediatric equipment by clinical staff

Receive pediatric patients and determine pediatric patient status

Communicate to Treatment Area Supervisor for dissemination as per disaster plan

After triage, move uninjured/unaffected children to designated Pediatric Safe Area

INTERMEDIATE:

Assess on-going staffing needs based on patient status report from:

Pediatric healthcare personnel (emergency department, in-patient, and OR)

Non-pediatric ancillary /support personnel

Pediatric Safe Area Coordinator

Assess additional medical and non-medical equipment/supply needs

Communicate with Pediatric Logistics Unit Leader via Ops Chief to Logistics Chief

Assure delivery of needed supplies to pediatric designated areas

Assess Pediatric Response Team basic needs: Food , rest, psychological support

Obtain status of pediatric casualties (discharges, admissions, transfers, and Pediatric Safe Area) and report to Operations Chief

Hold information sessions with Public Information Officer as needed

Obtain Child Survey Forms (See Security Section) from all pediatric patient areas

Report any unidentified or unaccompanied pediatric patients to Operations Chief

EXTENDED:

Debrief Pediatric Response Team and Pediatric Safe Area Coordinator regarding:

Summary of Incident, review of areas of success and opportunities for success

##### Pediatric Logistics Unit Leader (Job Action Sheet)

You report to: (Logistics Chief) Command Center location Phone number

**MISSION**: To ensure that the pediatric needs are addressed by Procurement, Transportation, Materials Supply, and Nutritional Supply during an emergency

IMMEDIATE:

Read this entire job action sheet

Obtain briefing from Logistics Chief

Number of expected pediatric patients and their conditions

Timeline for supply needs

Meet with Logistics Chief and distribute tasks to the following Unit Leaders:

**Procurement Unit Leader:**

Initiate Procurement Disaster Call list if warranted

Work with vendors for pediatric supplies including hospital vendors and community resources (local pharmacies and grocery stores) for back-up resources

**Transportation Unit Leader:**

Initiate Transportation Disaster Call list if warranted

Count open stretchers, carts, cribs, and wheelchairs for pediatric transportation

Ensure all adult equipment is appropriately modified and safe for pediatric transport

Report transportation options to Logistics Chief

Coordinate delivery of transportation options to designated pediatric area

Designate transporters as needed from CS staff or Labor pool

Ensure that all transporters are aware of pediatric safety issues and are not to leave pediatric patients unattended

**Materials/Supplies Unit Leader:**

Initiate Materials/Supplies Disaster Call list if warranted

Collect and coordinate essential pediatric medical equipment and supplies

Assist in preparation of pre-designated Pediatric Disaster Care Areas with Pediatric Services Unit Leader

Assist in preparation of pre-designated Pediatric Safe Area

**Nutritional Supply Unit Leader:**

Initiate Nutritional Call list if warranted

Estimate number of pediatric meals needed for 48 hours

Estimate pediatric food/snacks/hydration needs for Pediatric Safe Area

INTERMEDIATE:

Obtain regular updates from Logistics Chief

Assess additional equipment/supply needs for pediatrics

Address pediatric concerns, questions and issues as needed

EXTENDED:

Document actions and decisions, submit reports to Logistics Chief

Participate in debriefing, review areas of success and opportunities for improvement

##### PEDIATRIC SAFE AREA (PSA) COORDINATOR (Job Action Sheet)

You report to: (PEDIATRIC SERVICES UNIT LEADER)

Command Center location Phone number

**Mission**: To ensure that the pediatric safe area is properly staffed and stocked for implementation during an emergency, and to insure the safety of children requiring the PSA until an appropriate disposition can be made.

Immediate:

Receive appointment from Pediatric Services Unit Leader

Read this entire job action sheet

Obtain briefing from Pediatric Services Unit Leader

Ascertain that the pre-designated pediatric safe area is available

If not immediately available, take appropriate measures to make the area available as soon as possible

Gather information about how many pediatric persons may present to the area

Make sure that enough staff is available for PSA

Make sure that enough security staff is available for PSA

Make sure that there is adequate communication in PSA

Make sure that there is a sign in/out log for PSA

Make sure that all items in PSA checklist have been met; if there are any deficiencies, address them as soon as possible and report them the PSUL

Intermediate:

Ascertain the need for ongoing staff for PSA

Maintain registry of children in PSA as they arrive or are released to appropriate adult

Determine estimated length of time for the expected operational period of PSA

Maintain communication with Pediatric Services Unit Leader for planning needs

Determine if there are any medical or non-medical needs specifically needed by pediatric persons in PSA

Prepare an informational session for the pediatrics persons in the PSA

Prepare to make arrangements for sleeping capacities if needed

Ascertain if there will be any additional needs required for this event (volunteers, staff, security, and equipment)

Make sure that pediatric persons have the appropriate resources (food, water, medications, age-appropriate reading materials) and entertainment for their stay

Report frequently to Pediatric Services Unit Leader concerning status of PSA

Extended:

Make sure that PSA staff have enough breaks, water, and food during their working periods

Coordinate with Psychological Support for ongoing evaluations of mental health of volunteers and pediatric persons in case of need for psychosocial resources

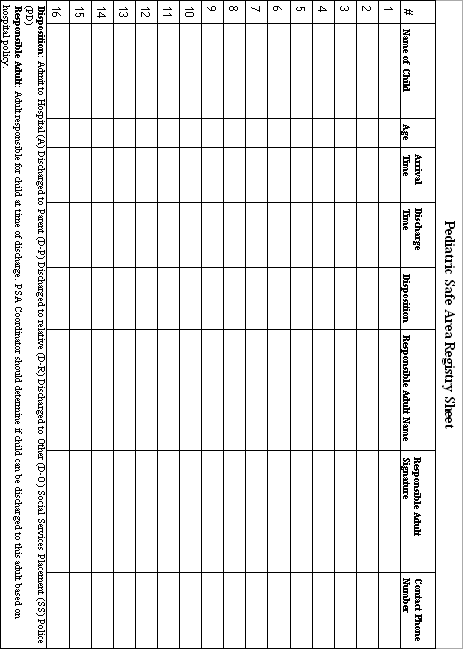
Document all action/decisions with a copy sent to the Pediatric Services Unit Leader

Other concerns:

## Pediatric Safe Area Checklist

|  |  |  |
| --- | --- | --- |
| **YES** | **NO** | **ITEM** |
|  |  | Needle boxes are at least 48 inches off the floor? |
|  |  | Do the windows open? |
|  |  | Are the windows locked? |
|  |  | Do you have window guards? |
|  |  | Plug-in covers or safety wiring for electrical outlets? |
|  |  | Strangulation hazards removed (cords, wires, tubing, curtain/blinds drawstrings)? |
|  |  | Can you contain children in this area (consider stairwells, elevators,  doors)? |
|  |  | Do you have distractions for the children (age and gender appropriate  videos, games, toys)? |
|  |  | Poison-proof the area (cleaning supplies, Hemoccult developer, choking  hazards, cords should be removed or locked) |
|  |  | Are your med carts and supply carts locked? |
|  |  | Do you need to create separate areas for various age groups? |
|  |  | Have you conducted drills of the plans for this area with all  relevant departments? |
|  |  | Do you have a plan for security for the unit? |
|  |  | Do you have a plan to identify the children? |
|  |  | Do you have a plan for assessing mental health needs of these children? |
|  |  | Are there any fans or heaters in use? Are they safe? |
|  |  | Do you have an onsite or nearby daycare? Could they help you? |
|  |  | Do you have enough staff to supervise the number of children (Younger  children will require more staff)? |
|  |  | Do you have a sign-in, sign-out sheet for all children and adults who enter  the area? |
|  |  | Will children need to be escorted away from safe area to bathrooms? |
|  |  | Are age-appropriate meals and snacks available for children? |
|  |  | Are various-sized diapers available? |
|  |  | Does the PSA have hand hygiene supplies? |
|  |  | Are there cribs, cots or beds available for children who need to sleep? |
|  |  | Does the PSA have a policy/protocol for handling minor illness in children  (Tylenol dosing, administering routine meds, etc) |
|  |  | Do you have an evacuation plan? |

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|  |  |  |  |
| --- | --- | --- | --- |
| **SAMPLE PEDIATRIC DISASTER MENU**  The following sample diet for pediatric patients lists foods that require the minimal amount of preparation or power supply to maintain temperatures. | | | |
|  | **Day 1** | **Day 2** | **Day 3** |
|  | **Breakfast** | **Breakfast** | **Breakfast** |
| 0-6 months | Regular or Soy Formula | Regular or Soy Formula | Regular or Soy Formula |
| 6 months - 1 yr. | Baby Cereal | Baby Cereal | Baby Cereal |
| Jarred Baby Fruit | Jarred Baby Fruit | Jarred Baby Fruit |
| Regular or Soy Formula | Regular or Soy Formula | Regular or Soy Formula |
| 1 yr. and above | Cheerios (or Substitute) | Cheerios (or Substitute) | Cheerios (or Substitute) |
| Warm cereal (1-2 years) | Warm cereal (1-2 years) | Warm cereal (1-2 years) |
| Powdered Milk (> 2 years) | Powdered Milk (> 2 years) | Powdered Milk (> 2 years) |
| Diced Canned Fruit | Diced Canned Fruit | Diced Canned Fruit |
|  | **Lunch** | **Lunch** | **Lunch** |
| 0-6 months | Regular or Soy Formula | Regular or Soy Formula | Regular or Soy Formula |
| 6 months - 1 yr. | Jarred Baby Meat | Jarred Baby Meat | Jarred Baby Meat |
| Jarred Baby Vegetable | Jarred Baby Vegetable | Jarred Baby Vegetable |
| Jarred Baby Fruit | Jarred Baby Fruit | Jarred Baby Fruit |
| Regular or Soy Formula | Regular or Soy Formula | Regular or Soy Formula |
| 1 yr. - 2 yrs. | Cream Cheese/Jelly Sandwich | Macaroni and cheese | Cheese Wiz© |
| Jarred Baby Vegetable | Jarred Baby Vegetable | Jarred Baby Vegetable |
| Diced Peaches | Diced Pears | Diced Fruit Cocktail |
| Bread/Crackers | Bread/Crackers | Bread/Crackers |
| Warm cereal | Warm cereal | Warm cereal |
| 2 yrs. plus | Cream Cheese/Jelly Sandwich | Macaroni and cheese | Peanut Butter/Jelly Sandwich**\*** |
| Diced Peaches | Diced Pears | Diced Fruit Cocktail |
| Graham Crackers | Graham Crackers | Graham Crackers |
| Powdered Milk | Powdered Milk | Powdered Milk |
|  | **Dinner** | **Dinner** | **Dinner** |
| 0-6 months | Regular or Soy Formula | Regular or Soy Formula | Regular or Soy Formula |
| 6 months - 1 yr. | Jarred Baby Meat | Jarred Baby Meat | Jarred Baby Meat |
| Jarred Baby Vegetable | Jarred Baby Vegetable | Jarred Baby Vegetable |
| Jarred Baby Fruit | Jarred Baby Fruit | Jarred Baby Fruit |
| Regular or Soy Formula | Regular or Soy Formula | Regular or Soy Formula |
| 1 yr. - 2 yrs. | Cheese slices - chopped | Canned Chicken - Chopped | Cheese Ravioli |
| Jarred Baby Vegetable | Jarred Baby Vegetable | Jarred Baby Vegetable |
| Applesauce | Bananas | Baby Fruit |
| Bread/Crackers | Bread/Crackers | Bread/Crackers |
| Warm cereal | Warm cereal | Warm cereal |
| 2 yrs. plus | Cheese Sandwich | Canned Chicken Sandwich | Cheese Ravioli |
| Diced Fruit Cocktail | Diced Peaches | Diced Pears |
| Graham Crackers | Graham Crackers | Graham Crackers |
| Powered Milk | Powdered Milk | Powdered Milk |

**\***Watch for symptoms of rare incidence of peanut allergy

### After a Disaster**:** Possible Reactions of Children

Children aged 5 and younger may:

* + Have fears of being separated from a parent
  + Be unusually fearful, “fussy”, clingy, and have crying bouts
  + Return to outgrown behavior, such as bed-wetting or baby talk
  + Have nightmares or problems sleeping
  + Have stomachaches, headaches or other physical complaints that do not have a medical base
  + Startle easily
  + Have a loss or increase in appetite

Children aged 6 to 11 may:

* + Engage in repeated play that depicts the disturbing events over and over
  + Have nightmares or problems sleeping
  + Have unusual outbursts of anger
  + Withdraw from friends and family
  + Be fearful, anxious or preoccupied with safety and danger
  + Return to behavior they have outgrown
  + Express feelings of guilt
  + Have frequent stomachaches, headaches or other physical complaints that do not have a medical base
  + Have problems concentrating
  + Experience persistent, disturbing feelings and memories when reminded of the event

Children aged 12 to 18 may:

* + Have appetite changes
  + Headaches, gastrointestinal problems
  + Loss of interest in social activities
  + Sadness or depression
  + Feelings of inadequacy and helplessness
  + Feelings of anger and aggression
  + Isolation from others, less interests in friendships
  + Repetitive behaviors such as hand-washing

### After a Disaster: A Guide for Parents and Caregivers

(From the National Institute of Mental Health)

Natural disasters such as tornados, or man-made tragedies such as bombings, can leave children feeling frightened, confused, and insecure.

Whether a child has personally experienced trauma or has merely seen the event on television or heard it discussed by adults, it is important for parents, care-givers, and teachers to be informed and ready to help if reactions to stress begin to occur.

Children respond to trauma in many different ways. Some may have reactions very soon after the event; others may seem to be doing fine for weeks or months, then begin to show worrisome behavior. Knowing the signs that are common at different ages can help parents and teachers to recognize problems and respond appropriately.

Preschool Age

Children from one to five years in age find it particularly hard to adjust to change and loss. In addition, these youngsters have not yet developed their own coping skills, so they must depend on parents, family members, and teachers to help them through difficult times.

Very young children may regress to an earlier behavioral stage after a traumatic event. For example, preschoolers may resume thumb sucking or bedwetting or may become afraid of strangers, animals, darkness, or "monsters." They may cling to a parent or teacher or become very attached to a place where they feel safe.

Changes in eating and sleeping habits are common, as are unexplainable aches and pains. Other symptoms to watch for are disobedience, hyperactivity, speech difficulties, and aggressive or withdrawn behavior. Preschoolers may tell exaggerated stories about the traumatic event or may speak of it over and over.

Early Childhood

Children aged five to eleven may have some of the same reactions as younger boys and girls. In addition, they may withdraw from play groups and friends, compete more for the attention of parents, fear going to school, allow school performance to drop, become aggressive, or find it hard to concentrate. These children may also return to "more childish" behaviors; for example, they may ask to be fed or dressed. Do boys and girls act differently?

Adolescence

Children twelve to fourteen are likely to have vague physical complaints when under stress and may abandon chores, school work, and other responsibilities they previously handled. While on the one hand they may compete vigorously for attention from parents and teachers, they may also withdraw, resist authority, become disruptive at home or in the classroom, or even begin to experiment with high-risk behaviors such as drinking or drug abuse. These young people are at a developmental stage in which the opinions of others are very important. They need to be thought of as "normal" by their friends and are less concerned about relating well with adults or participating in recreation or family activities they once enjoyed.

In later adolescence, teens may experience feelings of helplessness and guilt because they are unable to assume full adult responsibilities as the community responds to the disaster. Older teens may also deny the extent of their emotional reactions to the traumatic event.

How to Help

Reassurance is the key to helping children through a traumatic time. Very young children need a lot of cuddling, as well as verbal support. Answer questions about the disaster honestly, but don’t dwell on frightening details or allow the subject to dominate family or classroom time indefinitely. Encourage children of all ages to express emotions through conversation, drawing, or playing and to find a way to help others who were affected by the disaster.

Try to maintain normal routines and encourage children to participate in enjoyable activities. Reduce expectations temporarily about performance in school or at home, perhaps by substituting less demanding responsibilities for normal chores.

Finally, acknowledge that you, too, may have reactions associated with the traumatic event, and take steps to promote your own physical and emotional healing.

When to Seek More Help

Consultation with a mental health professional may be useful at any of these times. However, psychiatric consultation should be sought if any of the following is exhibited:

* + Excessive fear of something terrible happening to their parents or loved ones
  + Excessive and uncontrollable worry about things, such as unfamiliar people, places or activities
  + Fear of not being able to escape if something goes wrong
  + Suicidal thoughts or the desire to hurt others
  + If the child has hallucinations
  + Expressing feelings of being helpless, hopeless, and worthless