

# **Texas Pediatric Disaster Preparedness Guidance for Hospitals**

**February 2024**

**Acknowledgment**  
**Pediatric Preparedness Workgroup**

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## Introduction

These guidelines are a resource to assist hospitals and healthcare entities in addressing the unique needs of children in disaster planning. Hospitals should strive to incorporate pediatric components into their organization's Emergency Operations Plan (EOP).<sup>1</sup> Note that these guidelines represent current information within the medical and disaster literature at the time of publication. The recommendations in these guidelines do not indicate an exclusive course of treatment or serve as a standard of medical care. The strategies and recommendations in this document provide a foundation and may need to be augmented or tailored to meet the needs of individual organizations. Hospitals should consult with key representatives within their organization to assure consistency and compliance with local policies, as well as state and federal plans, statutes, and rules.<sup>1</sup>

## Background

The National EMS for Children (EMSC) Program has as performance measures pediatric readiness processes to ensure that hospitals have appropriately trained personnel, equipment/supplies, education and training programs, quality improvement processes, guidelines and protocols in place to meet the emergency care needs of children on a day-to-day basis. This facilitates a core level of hospital readiness in managing the emergency needs of children. Research has shown that in addition to other aspects of pediatric readiness, trauma centers that have a pediatric specific disaster plan have lower pediatric mortality rates.<sup>2</sup>

The Texas Voluntary Pediatric Recognition Program (VPRP) prepares emergency departments (EDs) to provide higher quality care for infants, children, and adolescents for the evaluation, treatment, and/or stabilization of children with medical and traumatic emergencies, which includes disaster preparedness.<sup>3</sup> These pediatric disaster preparedness guidelines are designed to be used in conjunction with the VPRP to provide hospitals a consistent approach as they work to develop and integrate pediatric components into their hospital's EOP. **As a guiding principle, assuring excellence in pediatric emergency care on a daily basis is the best preparedness for pediatric disaster care.**<sup>1</sup>

Texas has the nation's second largest pediatric population with 7.5 million children under the age of 18, which is 26% of the state's population.<sup>4</sup> Children account for approximately 25% of all victims when a disaster occurs and represent a particular challenge in disaster preparedness and planning. Children have unique and often complex physiological, psychosocial, and psychological needs that differ from adults and are often magnified during a disaster.<sup>5</sup> Some examples are:

- A child's condition can rapidly shift from stable to life-threatening due to their smaller circulating blood volume and fluid reserves. Note: Age and weight appropriate volume resuscitation can reduce the risks of irreversible shock or death.<sup>1</sup>
- Children are more sensitive to changes in body temperature and have a faster metabolism. For example, the ratio of body surface area to weight contributes to relatively rapid onset of hypothermia or hyperthermia.

- Infants, toddlers, and young children may not have the motor skills or cognitive ability to escape from a disaster area. Their decision-making skills may impact their ability to know how or when to flee from danger, emphasizing the need for adult guidance.
- Other physiologic differences such as more permeable skin, faster breathing, and a higher sensitivity to certain agents can lead to more severe symptoms in children when exposed to chemical, biological, or radiological agents.
- Children are at higher risk for abduction and abuse during disasters. There is a need to be alert for potential child trafficking during disaster incidents.
- Children’s lives and routines are likely disrupted during a disaster, making it particularly difficult for them to adjust to a changing and often unstable environment, and impacting their emotional well-being.<sup>1</sup>

As a result, it is essential that hospital disaster policies include and plan for this distinctive and vulnerable population.<sup>5</sup>

### **Purpose**

Hospitals designated as children's hospitals or with significant capability and capacity likely have EOPs inclusive of the pediatric population they routinely serve.<sup>6</sup> The 2021 National Pediatric Readiness Assessment found that only 48% of hospital emergency departments (EDs) nationwide include children in their disaster plans.<sup>7</sup> In Texas, only 46% of hospital disaster plans address issues specific to the care of children.<sup>8</sup> The common protocol for pediatric patients arriving at EDs needing advanced or specialized care and admission, is to transfer them to the nearest children's hospital or tertiary care facility with pediatric capabilities.<sup>6</sup> During disasters normal systems and processes may be overwhelmed and the probability of pediatric patients presenting in surges to hospitals with limited capability should be expected.<sup>6</sup>

### **Assumptions**

- Pediatric or children’s hospitals may be overwhelmed with receiving high volumes of pediatric patients or more critically ill/injured pediatric patients.<sup>6</sup>
- EMS agencies prefer to not separate family members, presenting pediatric and adult patients to single receiving facilities when possible.
- Pediatric patients often are not transported to the hospital by way of EMS, rather arrive in the ED by family or caregivers.
- The public is unable to distinguish a hospital with pediatric capabilities.
- All hospitals maintain EOPs among other policies and procedures that may outline standard operating procedures relevant to disaster response.
- In disaster situations, some hospitals may be able to utilize adult beds and equipment for treatment of older pediatric patients.
- Pediatric patients are anatomically different from adult patients and clinical considerations should be given to each age group as the needs and treatment modalities differ greatly with this population.<sup>6</sup>

The Pediatric Preparedness Workgroup was established to develop and identify resources to assist in ensuring pediatric considerations are included in hospital disaster planning. The Workgroup is multidisciplinary and includes representatives from the Texas Emergency Medical Services for Children (EMSC) Program, Pediatric and Disaster Preparedness and Response Committees of the Governor's EMS and Trauma Advisory Council (GETAC), Texas Health and Human Services Center for Health Emergency Preparedness and Response Program, Gulf 7 Pediatric Disaster Network, among others.

### **Emergency Operations Plan/Disaster Plan**

Each hospital and healthcare organization needs to have a disaster plan in place that outlines how their organization and staff will respond during an incident. Pediatric components and considerations need to be integrated within these disaster plans. Having pediatric expertise and representation on the hospital disaster and emergency planning committee is an essential step in assuring advocacy for pediatric needs during the development and subsequent revisions of the disaster plan. The following roles should be considered if they are not already part of the organization's incident command structure (IC) or developed as a part of an Emergency Management program or other program focused around responding to the care of pediatric patients:<sup>1,6</sup>

- Pediatric Emergency Care Coordinators (PECCs)
- ED medical director
- Lead nurse or nurse with pediatric training or specific pediatric certifications
- Hospital-based pediatricians and other sub-specialists (e.g., trauma surgeons, anesthesiologists)
- Pediatric nurses and advanced practice providers
- Perinatal professionals (e.g., neonatologists, nursery and obstetrical nurses)
- Child-life specialists
- Staff with psychosocial expertise (e.g., mental health specialists, social workers, spiritual care, and hospice staff)<sup>1,6</sup>

For hospitals without dedicated pediatric inpatient services, having a PECC that oversees these strategies has shown to significantly increase their pediatric readiness.<sup>9</sup> Additionally, hospitals without dedicated pediatric inpatient services should consider partnering with a pediatric hospitalist, pediatric nurse practitioner, pediatricians within the hospital network or corporate structure, or establishing relationships with pediatric tertiary care centers in their regions.<sup>9</sup> Hospital networks that are comprised of multiple hospitals may consider pooling resources and incorporating pediatric components into a standardized plan that each hospital then adopts.<sup>1</sup> The integration of those with pediatric clinical knowledge and expertise into disaster planning helps to assure an understanding of pediatric anatomical, physiological, growth and development, and psychosocial needs is addressed in disaster planning.<sup>1</sup>

Other areas that should be considered for incorporation into the hospital's current incident command system (HICS) are:

- Outline Pediatric Emergency Care Coordinators as medical technical specialists
- Predictable chain of command and management for pediatric patients<sup>10</sup>
- Organizational charts that allow for response to both adult and pediatric emergencies<sup>10</sup>
- Development and maintenance of a response check list that incorporates the needs of pediatric patients<sup>10</sup>
- Appropriate communication among victims of disaster (age appropriate), and within the internal and external environment<sup>10</sup>

### **Hazard Vulnerability Assessment**

Identifying potential hazards and risks is a key step in disaster preparedness. The Joint Commission (TJC) and Centers for Medicare and Medicaid Services (CMS) require a risk assessment or Hazard Vulnerability Assessment as part of their emergency preparedness standards.<sup>6</sup> Additionally, the proposed Texas Trauma Rules include trauma facilities having a comprehensive all-hazard disaster response plan. These rules are tentatively scheduled to become effective in November 2024.<sup>11</sup>

Using a Hazard Vulnerability Assessment (HVA) can provide a basis for mitigation and prevention tasks. An HVA emphasizes which types of natural or man-made disasters are likely to occur in a community (e.g., tornado, flood, chemical release, or terrorist event). They further highlight the impact those disasters may have on the community and any capabilities that are in place that may lessen the effects of the disaster.<sup>1</sup>

The HVA should be reviewed and updated minimally on an annual basis to identify changing or external circumstances. This includes conducting a pediatric-specific disaster risk assessment to identify where children congregate and their risks (e.g., schools, popular field trip destinations, summer camps, and juvenile justice facilities). Additionally, hospitals should participate with these relevant partners and stakeholders such as schools/ISDs and daycares, in completing their risk assessments.<sup>6</sup> After an HVA has been completed, the results should be used to help direct and plan drills and exercises based on high impact and high probability threats.<sup>1</sup> A pediatric hazard vulnerability assessment template, created by the Eastern Great Lakes Pediatric Consortium for Disaster Response, can be found [here](#). The intent of this tool is not to replace a hospital's HVA with facility specific processes. Instead, it is to encourage the inclusion of general pediatric considerations into risk analysis, disaster planning, and emergency response.

### **Community Partnerships**

Engaging community stakeholders and developing partnerships to enhance planning and exercise involvement before a disaster occurs is an essential component of hospital disaster preparedness.<sup>1, 5</sup> In Texas, the main community partner is the Healthcare Coalitions (HCC). The Texas Hospital Preparedness Program (HPP) works with the 22 statewide trauma service area (TSA) regions to develop and implement healthcare coalitions. Other community partners that can provide expertise in caring for children are not limited to primary care providers and community social or mental health services. Examples of stakeholders are: pediatricians, family practice physicians, free-standing emergency department (FSED) or urgent care personnel, faith-



based representatives, pediatric-centered medical homes, EMS, schools, childcare professionals, Red Cross, local health departments, medical reserve corps, office of emergency management, Community Emergency Response Teams (CERT), and community leaders.<sup>1,5</sup> Engagement with these community partners enables the hospital to understand regional response concepts of operations and access to resources external to the facility.<sup>6</sup>

### **Surge Capacity**

The Agency for Healthcare Research and Quality (AHRQ) defines surge capacity as the “healthcare systems' ability to rapidly expand beyond normal services to meet the increased demand for qualified personnel, medical care and public health in the event of bioterrorism or other large-scale public health emergencies or disasters.”<sup>10</sup> The ability to assemble a larger team of providers and find space needed to treat and manage pediatric patients is important in any large-scale incident. Resources and staff should be available to manage the non-injured children while their family may be unable to tend to them.<sup>10</sup>

In a mass casualty incident (MCI), it is likely that resources (e.g., staff, space, and supplies) to care for a large surge of high acuity children will be limited at most hospitals.<sup>1</sup> During the preparedness phase, ensure the communications plan for obtaining additional staff includes those with pediatric expertise. Facilities should also predetermine their capacity for pediatric casualties and have a plan in place to handle a surge of pediatric medical and trauma patients. When planning for surge, consider that children may be the majority of victims if the disaster involves a school, daycare center, or other entity where a large volume of children are located. Strategies to increase pediatric surge capacity within the hospital should be consistent with processes integrated into the regional disaster plan.<sup>1</sup>

All appropriate available space should be utilized; these spaces/areas may have to be reconfigured or modified in order to reduce hazards that may potentially harm children. Considerations to temporarily increase space to care for children may include:<sup>1</sup>

- Converting outpatient procedure beds into inpatient beds
- Convert adult units to pediatric units
- Expedite discharge for patients, especially healthy newborns and their mothers
- Establish discharge holding areas to open inpatient beds more quickly
- Use hallways or create alternate treatment areas (e.g., cafeteria, on-site fitness center)
- Develop portable pediatric specific disaster supply carts or bags that will ensure availability of appropriate equipment/supplies in any area that cares for children<sup>1</sup>

Considerations to create pediatric emergency treatment capacity outside the hospital may include:

- Initiate mutual agreements with other types of healthcare facilities, such as pediatric long-term care and rehabilitation facilities

- Working with the local, regional, and/or state jurisdictional authorities to ensure the needs of the pediatric population are considered when the need to build additional surge capacity outside of a hospital is being planned. EX: Developing a medical clinic in the Astrodome/Reliant Center during the aftermath of Hurricane Katrina.

In addition, it is essential to establish relationships and transfer agreements with pediatric tertiary care centers to facilitate the transfer process. The Texas “Consideration for Pediatric Consultation and Transfer” document can be found in Appendix A.

### **Patient Management and Treatment**

#### **Triage**

Triage processes used by emergency departments on a daily basis such as the Emergency Severity Index (ESI) triage system, are not recommended for use during a MCI.<sup>15</sup> Standard MCI triage systems guide and assist healthcare personnel and first responders in making rapid triage decisions based on objective criteria that otherwise may be influenced by emotion, especially when triaging children.<sup>1</sup> A variety of methods exist for triaging pediatric patients including JumpSTART, SALT, and the pediatric assessment triangle. Additionally, the Texas EMS Wristbands and EMS Triage Wristbands are a relatively new tool for EMS and hospitals to use on a daily basis, as well as during MCIs. These wristbands are usable for pediatric, infants, and neonates. In smaller infants and neonates, the wristband is placed on the leg, right below the patella (kneecap). Whichever method is chosen for pediatric triage, hospital providers should be well trained, and should participate in drills and exercises that include pediatric patients to become familiar with whatever tool is used.<sup>10</sup>

#### **Medications**

Children require different medications, routes, and dosages than adults due to their anatomic and physiologic differences. The need for trained personnel who understand dosing of medicine in pediatric patients will help ensure children receive the best possible care in a disaster setting.<sup>13</sup> Additionally, certain drugs and biological agents may have different effects on children.

Since the correct medication dose for a child is based on his/her weight, ensure access to an accurate method for correct weight-based kilogram dosing (the dosing method should not be dependent on electrical power in the event of a power outage).<sup>1</sup> For example, the length/weight based emergency tape, such as the Broselow-Luten™ is a color-coded tool to estimate a child’s weight and appropriate medication dosages. However, there are several length/weight based tools currently available. As there are limitations to every system, it is important to verify that the medication concentration stocked for use by your organization during a disaster is the same medication concentration listed on the drug-dosing tool, to avoid a potential dosing error.<sup>1</sup>

Weighing children with disabilities who routinely use a wheelchair or mobility device, or who cannot stand due to a new injury as a result of the disaster, presents a challenge to the healthcare provider. Ideally, a wheelchair scale, sitting scale, mechanical lift, or bed with weight measuring capability would be available.<sup>12</sup> If not, an alternative is to first weigh yourself independently, then re-weigh yourself while holding the child. You can subtract your independent weight from the combined weight to identify the difference. Be sure you are measuring in kilograms.<sup>13</sup>

It is recommended that every facility create pre-printed emergency drug dosing forms and tools that encompass weights from 3kg to 50 kg based on the drug concentrations specific to the facility. This will help to avoid medication calculation errors. This tool should be used during day-to-day pediatric emergencies to increase staff familiarity.<sup>1</sup>

It should be anticipated that there will be a shortage of liquid concentrations of medications which are need for infants and children, or others who are unable to swallow pills.<sup>1</sup> As such, medications may need to be compounded or made into a solution for administration to children. Hospitals should ensure that sufficient pediatric pharmacy resources and safeguards are available.<sup>10</sup>

Since access to external supplies may be challenging during the initial hours and days of a disaster, develop a plan to stock 96 hours of medications, food and water for staff, patients, families, and projected surge capacity. This stockpile should include pediatric and neonatal supplies as well. Keep in mind that a process for securing these supply items and checking expiration dates and rotating stock will need to be developed.<sup>1,10</sup> A list of medications that are recommended to stock in the hospital for pediatric use can be found in Appendix B.

### **Equipment**

The need for trained personnel who understand specific pediatric equipment needs will help ensure children receive the best possible care in a disaster. Critical supplies include medical equipment as well as ensuring adequate amounts of things like cribs, diapers and formula specific to pediatric patients and families.<sup>14</sup> The federal recommendation is to maintain a stockpile of at least 96 hours of supplies.<sup>1</sup> A list of supplies and equipment that are recommended to stock in the hospital for pediatric use can be found in Appendix B.

During a disaster event, typical transfer patterns to pediatric tertiary care centers and hospitals with specialized pediatric services may be disrupted and children may need to be managed at community hospitals for an extended period of time. Consider stocking additional practical supplies to have on-hand for children, such as extra pillows and blankets, pediatric-sized clothing and hospital gowns, flashlights, batteries, diapers, wipes, formula, dextrose in water, bottles, nipples, and distraction devices (e.g., toys, books, board games, art supplies, bubbles, and dolls).<sup>1</sup>

### **Decontamination**

The decontamination/isolation process can be overwhelming to children of any age. As such, special considerations need to be made during the decontamination process, as it will require more time, resources, and personnel compared to the decontamination of adults.<sup>1,10,14</sup> Special considerations in the decontamination of children should include the following:

- Efforts should be made to have caregivers around to help and allow families to remain together to decrease stress of separation.<sup>15</sup>
- Attention to airway management is a priority throughout decontamination.<sup>10</sup>
- The use of warmer water for decontamination to prevent hypothermia in small children is essential to planning.<sup>14</sup> Since children lose their body heat quickly, ensure access to warm

shower water temperature (98° F-110° F/36.6°C-43.3 °C). Assure processes are in place to monitor the water temperature before and during decontamination. Immediate access to drying and warming equipment and supplies is essential after decontamination. The facility should consider having access to several of the following items to ensure the child/infant remains normothermic during and after the decontamination process:<sup>1</sup>

- Appropriately sized gowns
  - Warming blankets
  - Forced-air warming therapy
  - Overhead heat lamps
  - Isolette/radiant warmers
  - Fluid/blood warmer
  - Chemical warming pads
- Children may be frightened during decontamination and may scream or resist.
  - Older children may resist decontamination out of fear, peer pressure, and modesty issues (even in front of their parents or caregivers).
  - Separation of families during decontamination should be avoided, but medical issues take priority.
  - Most children will need assistance with decontamination. Young unaccompanied children, such as infants and toddlers, will need assistance from staff member when family is unavailable.
  - Clothing can assist in the identification of a child separated from parents/caregivers. However, identification of children after decontamination will be more challenging when they are no longer wearing their own clothing or jewelry. Incorporate identification processes that address clothing removal during decontamination, and the documentation of clothing items. This process could include the use of plastic triage tags with the child's name written on it or writing the child's name on their body with a red colored marker.
  - Additional staff will be needed to guide and transport children from the Hot Zone to the Cold Zone, and into the treatment areas. Also, anticipate the needs of those who are blind, deaf, non-English speaking, or use mobility devices.
  - Plan for how contaminated infants, young children, and Children with Special Healthcare Needs (CSHCN)/Children with Functional Access Needs (CFAN) will be managed in the decontamination area. Whenever possible, shower decontamination systems must accommodate an adult (parent/caregiver) as well as the child so the family unit can proceed together through the decontamination process. If this is not possible, then decontaminate the child and send him/her to a designated holding area. Identify how children will be reunited with family members after the decontamination process.
  - Take into consideration that when infants and children are wet, they will be slippery. They should never be carried by staff or the parent/guardian through the shower. Avoid potential injury by utilizing a system such as a plastic laundry basket or other device instead of carrying the infant or child. Containers used to move infants and young children through the decontamination process should have drainage holes to allow water to flow through.

- Assure that the shower system provides high volume and low water pressure with handheld sprayers that are child friendly. Also, during the decontamination process use soft bristle brushes with children to avoid skin irritation.<sup>1,6,10</sup>

The process for decontamination of children should be practiced at least once per year by staff who are expected to perform these duties during a disaster.

### **Reunification/Patient Identification**

In the setting of a disaster, families and children are often displaced and/or separated from caregivers. A pediatric family reunification plan must exist. All children entering the healthcare system should be tracked in order to support future reunification efforts. Tracking should include specific descriptors (including clothing worn) particularly if photographs are not possible. Allowing parents and children to remain together for as much of the care process as possible will help to alleviate some of the emotional stress of a disaster and help prevent a large quantity of unaccompanied minors.<sup>9,14</sup>

A workable partnership between the hospital and other agencies or institutions must be arranged as part of any pediatric disaster planning process. The Healthcare Coalitions, law enforcement agencies, local and state government agencies, along with local bus service, the American Red Cross, media outlets, missing children agencies, websites, call centers, toll-free numbers, and reunification sites should all be part of the network that helps to reconvene families during and after a disaster. Hospitals will also need plans for internal Family Information Centers to provide support to the families of disaster victims and facilitate reunification.<sup>10</sup>

Take a picture of each child upon arrival to the hospital to facilitate identification. If the child can provide his/her name, write it on the back of the photo. Include a description of the child (e.g., child is a female with blonde hair, wearing a blue coat, black shoes, and carrying a pink backpack). Use existing tracking systems and/or databases to assist with reunification. Electronic tracking systems and databases may be available to help gather and share information on unaccompanied children.<sup>1</sup>

- The Texas Wristband Project is a tool used by EMS and hospitals for tracking, identifying, and/or reuniting adults and children that have been affected by a disaster. The wristband has an identifying number and barcode that is documented by EMS and by the hospital in their electronic medical record. The wristband is designed to track the patient throughout the continuum of care, including patient transfer to another facility. The wristband is ultimately removed once the patient has been discharged.

Verification of guardianship must be completed before releasing children to a parent or caregiver. Although the child may recognize their parent or caregiver, there may be times when the presenting parent or caregiver does not have legal custody of the child. Partner with the social services department if available. Recommended processes and documents that can assist with verifying the child's identity and parent or caregiver guardianship are:<sup>1</sup>

- Interview the child
- School/personnel records

- Child identification card issued by a law enforcement agency
- Legal documents (e.g., birth records, child support documents)
- Government issued identification card of parent or caregiver
- Questions to consider when verifying guardianship
  - Was this the person the child was living with prior to the incident?
  - Is this the person who is the usual guardian of the child?
  - Does this person have proof of guardianship?
  - Does this person describe the child accurately to staff?
  - Does this person pick the child accurately from a group of pictures?<sup>1</sup>

Prior to releasing the child to the guardian, it is essential to gather information, including:<sup>1</sup>

- Take a picture of the guardian
- Obtain a copy of the guardian's identification
- Document the guardian's permanent address and current address
- Take a picture of the guardian's vehicle including license plate number
- Verify the guardian's current phone number<sup>1</sup>

### **Safety and Security**

Pediatric safety and security issues are critically important for all hospitals. The hospital's security plan and procedures should be activated during events with pediatric patients.<sup>6</sup>

Make all reasonable efforts to keep the family together during all phases of care. This includes during evacuation, decontamination, and sheltering. Designate family areas that are separate from the general population in order to keep families together and help ensure a safe and secure environment for children.<sup>1</sup>

Two types of accompanied children in the aftermath of a disaster that may present to your hospital are:

1. The pediatric patient who is a victim of a disaster and is with a responsible parent or a parent that is also a disaster victim.
2. The pediatric patient who is not a victim of the disaster (does not warrant medical treatment) but is accompanying an adult victim of a disaster.<sup>10</sup>

The unaccompanied or displaced child must be identified immediately to ensure his/her safety. This child may or may not need medical treatment. Your hospital should be surveyed for such unaccompanied children, as they will likely be listed as missing, by family members. All of these children should be tracked and reported to the Hospital Emergency Operations Center.<sup>10</sup> Additionally, contact law enforcement and other agencies such as the Department of Children and Family Services and the National Center for Missing and Exploited Children<sup>®</sup> for assistance with reunifying unaccompanied minors.<sup>1</sup>

Your facility should have the capability to establish a Pediatric Safe Area, which is an area of the hospital where unaccompanied pediatric visitors and unaccompanied released pediatric patients

are grouped together under supervision. Pre-identified staff must be trained to serve as physical security to monitor safe areas for both injured and non-injured children along with the ingress/egress routes to these areas.<sup>6,10</sup>

The Pediatric Safe Area should be “kid-friendly” and safe:

- Distractions (toys, books, art supplies, etc.) should be readily available.
- The area must be proofed from choking hazards and poisonous substances.
- There should be no injury-prone objects in the area (sharp objects, etc.).
- Bathrooms should be readily available to the children.
- Windows should be locked.
- The area should be away from stairwells and other fall-risks.
- Pediatric snacks should be available.
- There should be enough staff and security to ensure the safety of the children.
- There should be a sign-in and sign-out sheet to help with tracking, which includes times, the name of the adult picking up the child, and his/her contact information.<sup>10</sup> (Appendix E)

### **Behavioral Health Support**

Children react differently to disasters than adults due to age, developmental level, and their inability to fully understand the circumstances surrounding the situation.<sup>1,14</sup> Some may have overt reactions in the acute phase, while others may not manifest symptoms for many weeks or months.<sup>10</sup> The need for behavioral specialists is crucial in a disaster situation due to the initial trauma both physical and emotional, to the patient and to address potential loss or significant morbidity to the family. These specialists can intervene early so as to mitigate some of the downstream issues that may arise such as long-term behavioral changes and post-traumatic stress disorder (PTSD).<sup>14</sup>

Psychological First Aid (PFA) is an evidence-based approach to help victims cope in the aftermath of a disaster. The use of PFA can provide immediate as well as long-term benefits. Although PFA is especially helpful for children, it can also benefit adults and other family members. The primary objective of Psychological First Aid is to create and sustain an environment of safety, calm, connectedness to others, self-efficacy or empowerment, and hope.<sup>1,10</sup> PFA training should be made available to all staff and make educational materials easily accessible to staff for use in a disaster.<sup>10</sup> Additionally, identify referral resources in the community for children experiencing trauma (e.g., behavioral health specialists with expertise in trauma treatment of children) and/or loss (children’s bereavement centers/camps or hospice programs).<sup>10</sup> Additional information on these strategies and resources can be found in Appendix C.

### **Children with Special Healthcare Needs/Children with Functional Access Needs**

There is a high medical utilization rate of children with special healthcare requirements. Various terms are used to define this population. For the purposes of these guidelines the terms Children

with Special Healthcare Needs (CSHCN) and Children with Functional Access Needs (CFAN) is used. Both the Federal Hospital Preparedness Program and the Public Health Emergency Preparedness (PHEP) program require the inclusion of at-risk populations (including children) into all levels of emergency planning.<sup>1</sup>

Although difficult to plan for, a systematic approach should be used when encountering these patients and addressing their needs, including ensuring staff training, the availability of special equipment, and the importance of family-centered care.<sup>14</sup> A number of resources currently exist that can be utilized by hospital staff when caring for CSHCN/CFAN. A list of resources can be found in Appendix D.

### **Disaster Exercises and Drills**

Texas has the nation's second largest pediatric population with 7.5 million children under the age of 18, which is 26% of the state's population.<sup>4</sup> As children account for 25% of all victims during a disaster, it is recommended that children (especially infants and toddlers), represent 25% of patients in all disaster drills and exercises. Simulation exercises that include all age groups are critical to ensure that the hospital can handle a variety of age groups and can address the challenges specific to pediatric patients.<sup>14</sup> Age groups to be defined by your regional Health Care Preparedness Coalition.

There are several ways to train personnel, including interactive presentations, lectures, table-top drills, and full-scale drills and exercises. Training should include pediatric patients, and involve pediatric triage, treatment and transport. Field decisions regarding pediatric patients are always somewhat more difficult due to differences in cognitive function and size.<sup>10</sup> The following should be considered when planning drills, exercises, and education:<sup>1</sup>

- Ensure the inclusion of child victims of all ages and CSHCN/CFAN in all drills/exercises.
- Regularly conduct pediatric evacuation, surge, decontamination, and infant/child abduction drills/exercises.
- Incorporate testing of patient identification and family reunification plans into training and exercises, since identification and reunification are high risk activities. Access to correct patient identification can assist in identifying specific medical concerns (e.g., pre-existing medical conditions and allergies), and assist with the safe reunification of children to the correct caregiver(s).
- Small infants and young children (due to their developmental levels) will likely have limited or no verbal skills making them poor historians during a disaster. This creates unique challenges, especially when trying to identify young children and reunite them with their families.
- Patient identification tools should include detailed physical and medical specifics. The tools should also include a process for differentiating between children who are the same age, have similar hair and eye color, and are wearing nearly identical clothing (e.g., school uniforms, organizational group t-shirts, etc.).



- Using actual children in exercises is considered ideal in order to provide a realistic experience, however there are many associated challenges and limitations. Other options include the use of simulated victims. Incorporate child victims into exercises by accessing:
  - Employees’ children during a “Bring your Child to Work Day”
  - Local girl scout or boy scout troop participation
  - Local schools (especially those with fine arts/acting groups)
  - Dolls or mannequins
  - Paper cut out victims
- Participation of children in drills/exercises not only enhances the capabilities of responders, but also provides the opportunity for children to learn about disasters. The benefits that children gain by participating in drills/exercises includes the following:
  - Engages them in preparedness initiatives
  - Helps them to understand what may occur during a disaster
  - Teaches them how to respond (e.g., “Drop, Cover and Hold On” during an earthquake)
  - Decreases fear during an actual response
  - Improves overall family preparedness when children share lessons learned with their family.<sup>1</sup>

Keep drills that include actual children short, safe, and fun. Listed below are some potential ideas to consider.<sup>1</sup>

- Invite community members/partners (e.g., EMS, Fire, Police).
- Have employees bring their own children.
- Let the employees/parents have visual contact at all times to ensure overall safety and comfort.
- Allow employees/parents to share feedback after the drill.
- Utilize real children for testing of identification and reunification processes.
- Consider using a few children and substituting mannequins, dolls, or paper-cutouts for the remaining disaster patients.
- Ask the hospital Volunteer Department if a pet therapy dog can participate in order to test some unique situations that a service dog or guide dog may encounter.
- Engage staff members and/or their family members who may have CSHCN/CFAN to elicit their direct feedback with the disaster preparedness process (e.g., hazmat, medical care areas, identification, and reunification). A focus group of parents who have CSHCN/CFAN may be particularly helpful in identifying potential red flags impeding the safety of their children.
  - Often, CSHCN/CFAN are not included in disaster drills. This lack of inclusion can leave hospitals unprepared. By making it a standard practice to include CSHCN/CFAN in every drill, a hospital can adequately test the preparedness of their system.
- Assess the directions being given to patients as they proceed through different areas (i.e., flow from Hot Zones to Cold Zones) to determine if they are appropriate and will accommodate at-risk patients, such as those who are non-English speaking or who are deaf.

- Videotape a disaster drill to facilitate capturing portions of the exercise that went well and those areas where improvement is warranted.<sup>1</sup>

After each drill, a pediatric care review should be completed (Appendix E). This process can be incorporated into After Action Reports, quality improvement processes, or corrective action plans.<sup>5</sup> Through these processes, it is critical to assess if the needs of children were adequately met. Lessons learned should be communicated to all who are part of the disaster response team, including hospital leadership.<sup>1</sup> After revisions to the plan are made, a drill should be conducted to test any new processes.<sup>1</sup> Consider sharing lessons learned with other hospitals within your region.

## References

1. Illinois Emergency Medical Services for Children/Illinois Department of Public Health and Ann and Robert H. Lurie Children's Hospital of Chicago. (2018). Pediatric Disaster Preparedness Guidelines for Hospitals, Third Edition. Retrieved from [https://www.luriechildrens.org/globalassets/documents/emsc/resourcesguidelines/guidelines-tool-and-other-resources/practice-guidelinestools/00\\_peddisasterguide3ed\\_jan2019final.pdf](https://www.luriechildrens.org/globalassets/documents/emsc/resourcesguidelines/guidelines-tool-and-other-resources/practice-guidelinestools/00_peddisasterguide3ed_jan2019final.pdf)
2. Melhado, C.G., Yorkgitis, B.K., Remick, K. *et al.* Pediatric Readiness and Trauma Centers: History, Relevance, and Practical Application. *Curr Trauma Rep* (2023). <https://doi.org/10.1007/s40719-023-00263-7>
3. Texas EMS for Children Voluntary Pediatric Recognition Program (VPRP). (2021). Retrieved from [https://cdn.bcm.edu/sites/default/files/vprp-applicant-manual\\_revised-oct.-2021.pdf](https://cdn.bcm.edu/sites/default/files/vprp-applicant-manual_revised-oct.-2021.pdf)
4. The Annie E. Casey Foundation. Kids Count Data Center. Retrieved from <https://datacenter.at.kidscount.org/data/tables/3050-total-childpopulation#detailed/2/false/1729,37,871,870,573,869,36,868,867,133/any/6304>. Accessed September 15, 2022.
5. Barrett J., Rodriguez M., Moegling, M., Chung, S. EMSC Innovation and Improvement Center Disaster Domain Toolkit Subcommittee. (2022). Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Policies. Retrieved from <https://emscimprovement.center/education-and-resources/toolkits/pediatric-disaster-preparedness-toolbox/>
6. Louisiana Hospital Foundation. (2022). Hospital Pediatric Disaster Plan - Planning Template, Basic Level. Retrieved from <https://www.lha-foundation.org/LHAFoundation/LHAFoundation/EP/EPPlanningResources.aspx?hkey=abcd6e52-8cba-4a5c-838c-0c6bea0c9c5>.
7. Gausche-Hill M, Ely M, Schmuhl P, et al. A national assessment of pediatric readiness of emergency departments [published correction appears in *JAMA Pediatr.* 2015 Aug;169(8):791]. *JAMA Pediatr.* 2015;169(6):527-534.doi:10.1001/jamapediatrics.2015.138
8. EMS for Children Data Center. (2021). 2021 National Pediatric Readiness Assessment State/Territory Frequency Report.
9. Pilkey D, Edwards C, Richards R, Olson LM, Ely M, Edgerton EA. Pediatric Readiness in Critical Access Hospital Emergency Departments. *J Rural Health.* 2019;35(4):480-489. doi:10.1111/jrh.12317
10. Pediatric Disaster Preparedness Subcommittee of the State of California Health and Human Services Agency Emergency Medical Services Authority. (2010). EMSC Pediatric Disaster Preparedness Guidelines: Hospitals. Retrieved from <https://www.calhospitalprepare.org/post/pediatric-disaster-preparedness-guidelines-hospitals>
11. Texas Department of State Health Services Office of EMS and Trauma Systems. (2022). Trauma Rule Resource Document. Retrieved from <https://www.dshs.texas.gov/dshs-emstrauma-systems/rules/rules-revision#Trauma%20Rules>
12. Froehlich-Grobe K, Nary DE, VanSciver A, Washburn RA, Aaronson L. Truth be told: evidence of wheelchair users' accuracy in reporting their height and weight. *Arch Phys Med Rehabil.* 2012 Nov;93(11):2055-61. doi: 10.1016/j.apmr.2012.05.005. Epub 2012 May 15. PMID: 22609118; PMCID: PMC3562126
13. Virtual Care: How to Accurately Measure Your Child's Height and Weight at Home. *Sick Kids: About Kids Health*, 14 Jan. 2021,

[www.aboutkidshealth.ca/article?contentid=3910&language=english#:~:text=If%20your%20child%20is%20too,weight%20to%20identify%20the%20difference](http://www.aboutkidshealth.ca/article?contentid=3910&language=english#:~:text=If%20your%20child%20is%20too,weight%20to%20identify%20the%20difference). Accessed 8 Dec. 2023.

14. National Pediatric Readiness Project Assessment: Gap Report - Importance Statements. (2021). Retrieved from [https://www.pedsready.org/docs/NPRP%20Gap%20Report%20Importance %20Statements.pdf](https://www.pedsready.org/docs/NPRP%20Gap%20Report%20Importance%20Statements.pdf)
15. Assistant Secretary for Preparedness and Response Technical Resources Assistance Center. (2019). Mass Casualty Trauma Triage Paradigms and Pitfalls. Retrieved from <https://files.asprtracie.hhs.gov/documents/aspr-tracie-mass-casualty-triage-final-508.pdf>

**APPENDIX A: Consideration for Pediatric Consultation and Transfer**

# **Consideration for Pediatric Consultation and Transfer**

**Drafted by a work team of the Governor's EMS and Trauma  
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# Consideration for Pediatric Consultation and Transfer

## Introduction

Hospitals that are designated trauma centers must have transfer guidelines in place as part of the designation process. In response to the many requests for a template or guideline, the Pediatric Subcommittee of the Governor's EMS and Trauma Advisory Council drafted a compilation of guidelines that hospitals may utilize as their own transfer guidelines.

The transfer guidelines were developed in accordance with published standards (internet and print) across the nation at other trauma centers, a publication from the AAP (American Academy of Pediatrics) as well as published NHTSA (National Highway and Transportation Safety Administration) standards in regards to mode of transport. The transfer guidelines are meant to be inclusive of pediatric critical illness as well as pediatric trauma.

The following guidelines are not part of the Texas Department of State Health Services Safety and Administrative Code and are merely a template that facilities may adopt in order to fulfill requirements for trauma designation or simply to facilitate development of appropriate pediatric inter-facility transfer guidelines.

The Department of Health does not mandate Texas State designated trauma centers or non-trauma center hospitals to use these guidelines, but offers them to assist trauma centers and non-trauma centers in the development of their own guidelines. The Department recognizes the varying resources of different centers and that approaches that work for one hospital may not be suitable for others. The decision to use these guidelines in any particular situation always depends on the independent medical judgment of the medical provider.

## **Consideration for Pediatric Consultation and Transfer Trauma and Critical Illness**

The transfer of pediatric patients with traumatic injuries as well as non-traumatic illness is addressed in the following document. The State of Texas has adopted four levels of trauma care in order to enhance the care of injured patients across the State. The acutely injured child who does not require critical care management can be cared for in a level 3 or level 4 Trauma Center. It is only the critically injured child and/or a child whose level of care needs exceed the local area capability that should be transferred to the most appropriate designated trauma facility with pediatric capabilities. It is accepted that some level 3 trauma patients may be admitted to an ICU for close observation; but if the patient begins to require ICU management, the patient should be transferred to the most appropriate designated trauma center with pediatric capabilities to care for a critically injured child. When a pediatric trauma center is not available, its role should be carried out by an adult trauma center that fulfills the requirement for provision of optimal trauma care to children.<sup>1</sup>

In addition, pediatric patients with a non-traumatic illness can also be cared for in regional facilities. However, patients should be transferred to a higher level of care when their medical and/or nursing care exceeds what is available in their community.

Because the state of Texas is such a vast geographically challenging state and Trauma Services Areas are well defined with existing referral patterns, it is not the intent of this guideline to change those already established relationships. However, it is intended to encourage hospitals to align themselves with a facility that has the capacity to manage pediatric critical care and pediatric trauma. It is not intended to mandate transfer outside a region but to heighten the awareness of the need for Pediatric Critical Care and Trauma Services.

The following contains guidelines of when to transfer the critically injured and/or ill pediatric patient. The guidelines serve as a resource for hospitals in the State of Texas. The Texas Governor's EMS and Trauma Advisory Council recognizes a pediatric patient as one aged 15 years and under. It is noted that many pediatric patients in their early teens may be the size of a small adult which may prompt physicians and surgeons to keep them in their local facility. Much Caution is advised with this practice, as these patients still have emotional and physical needs akin to all children such as child life services as well as nurses and ancillary staff, trained to care for the pediatric patient.

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<sup>1</sup> Resources for Optimal Care of the Injured Patient: 2014, American College of Surgeons Committee on Trauma., Chapter 10 page 66.



# Consideration for Pediatric Trauma Transfer

## Physiologic Criteria:

1. Depressed or deteriorating neurologic status (GCS  $\leq 14$ ) with focus on changes in the motor function
2. Respiratory distress or failure
3. Children requiring endotracheal intubation and/or ventilatory support
4. Shock, uncompensated or compensated
5. Injuries requiring any blood transfusion
6. Children requiring any one of the following:
  - a. Invasive monitoring (arterial and/or central venous pressure)
  - b. Intracranial pressure monitoring
  - c. Vasoactive medications

## Anatomic Criteria:

1. Fractures and deep penetrating wounds to an extremity complicated by neurovascular or compartment injury
2. Fracture of two or more major long bones (such as femur, humerus)
3. Fracture of the axial skeleton
4. Spinal cord or column injuries
5. Traumatic amputation of an extremity with potential for replantation
6. Head injury when accompanied by any of the following:
  - a. Cerebrospinal fluid leaks
  - b. Open head injuries (excluding simple scalp injuries)
  - c. Depressed skull fractures
  - d. Sustained decreased level of consciousness (GCS  $\leq 14$ )
  - e. Intracranial hemorrhage
7. Significant penetrating wounds to the head, neck, thorax, abdomen or pelvis including the groin
8. Pelvic fracture
9. Significant blunt injury to the chest, abdomen or neck (e.g. hanging or clothesline MOI's)

## Other Criteria:

1. Suspicion for Child Maltreatment as evidenced by:
  - a. injuries sustained with no reported explanation
  - b. Injuries sustained that do not match the developmental capability of the patient
  - c. History of apparent life threatening event
  - d. Upper extremity fractures in a non-ambulatory child

Pediatric patient with burn injuries should be transferred to a Burn Center per the following burn criteria:

### **American Burn Association Transfer Criteria:**

A burn center may treat adults, children, or both. Burn injuries that should be referred to a burn center include the following:

1. Partial-thickness burns of greater than 10 percent of the total body surface area.
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
3. Third-degree burns in any age group.
4. Electrical burns, including lightning injury.
5. Chemical burns.
6. Inhalation injury.
7. Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
8. Burns and concomitant trauma (such as fractures) when the burn injury poses the greatest risk of morbidity or mortality. If the trauma poses the greater immediate risk, the patient's condition may be stabilized initially in a trauma center before transfer to a burn center.
9. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.
10. Burn injury in patients who will require special social, emotional, or rehabilitative intervention.

### **Burns in children**

**Children with burns should be transferred to a burn center verified to treat children. In the absence of a regional pediatric burn center, an adult burn center may serve as a second option for the management of pediatric burns.**

### **Other criteria for transfer:**

1. Children requiring pediatric intensive care other than for close observation
2. Any child who may benefit from consultation with, or transfer to, a Pediatric Trauma Center or a Pediatric Intensive Care Unit.
3. Children with injuries suspicious of child maltreatment e.g. inflicted burn injury

Reference: *Resources for the Optimal Care of the Injured Patient: 2014*

# Consideration for Pediatric Non-Trauma Transfer

## Physiologic Criteria

1. Depressed or deteriorating neurologic status (GCS $\leq$ 14).
2. Severe respiratory distress and/or respiratory failure
3. Children requiring endotracheal intubation and/or ventilatory support.
4. Serious cardiac rhythm disturbances,
5. Status post cardiopulmonary arrest.
6. Heart failure.
7. Shock responding inadequately to fluid resuscitation.
8. Children requiring any one of the following
  - a. Arterial pressure monitoring.
  - b. Central venous pressure or pulmonary artery monitoring.
  - c. Intracranial pressure monitoring.
  - d. Vasoactive medications.
  - e. Treatment for severe hypothermia or hyperthermia
  - f. Treatment for hepatic failure.
  - g. Treatment for renal failure, acute or chronic requiring immediate dialysis.

## Other Criteria

1. Near drowning with any history of loss of consciousness, unstable vital signs or respiratory problems.
2. Status epilepticus.
3. Potentially dangerous envenomation. Use of a snakebite protocol is encouraged
4. Potentially life threatening ingestion of, or exposure to, a toxic substance.
5. Severe electrolyte imbalances.
6. Severe metabolic disturbances.
7. Severe dehydration.
8. Potentially life-threatening infections, including sepsis.
9. Children requiring intensive care other than for close observation.
10. Any child who may benefit from consultation with, or transfer to, a Pediatric Intensive Care Unit
11. Suspicion for child maltreatment. e.g. found "down" for no apparent reason
12. Any condition that exceeds the capability of the facility

## **Consideration for Interfacility Transport:**

### **Transport Team and Method of Transport**

**Decision:** The decision to transfer a patient is based on the previously listed anatomic and/or physiologic criteria in which the care of the patient is above and beyond the capability of the referring institution. Referring institutions need to have established policies and procedures in regards to the process of initiating the transfer (i.e. who talks to whom), gathering the required paperwork, as well as the process of informing the family and giving them maps to the receiving institution. The list of hospitals at the end of this document indicates the phone number(s) suggested by the referring institution to contact them for pediatric transfers.

**Method:** The method of interfacility transport is dependent on many variables. The state of Texas holds many geographic as well as weather challenges which will influence the referring provider's decision on moving a patient from one facility to the next. Transport by private vehicle is not encouraged with **critically** sick and/or injured children. Two areas to address in this determination of transport team as well as method of transport are patient related factors and general transport issues. Special consideration should be made for international transports. Intercept transports should be avoided.

**Definition:** For the purposes of this document, a pediatric transport team is considered a specialty care transport team. The Texas Administrative Code Title 25, Part I, Chapter 157 Subchapter B, Rule 157.11 defines a Specialty Care Transport as follows:

Specialty Care Transports. A Specialty Care Transport is defined as the interfacility transfer by a department licensed EMS provider of a critically ill or injured patient requiring specialized interventions, monitoring and/or staffing. To qualify to function as a Specialty Care Transport the following minimum criteria shall be met:

(1) Qualifying Interventions:

(A) patients with one or more of the following IV infusions: vasopressors; vasoactive compounds; antiarrhythmics; fibrinolytics; tocolytics; blood or blood products and/or any other parenteral pharmaceutical unique to the patient's special health care needs; and

(B) one or more of the following special monitors or procedures. mechanical ventilation; multiple monitors, cardiac balloon pump; external cardiac support (ventricular assist devices, etc.); any other specialized device, vehicle or procedure unique to the patient's health care needs.

(2) Equipment. All specialized equipment and supplies appropriate to the required interventions shall be available at the time of the transport.

(3) Minimum Required Staffing. One currently certified EMT-Basic and one currently certified or licensed paramedic with the additional training as defined in paragraph (4) of this subsection; or, a currently certified EMT-Basic and a currently certified or licensed paramedic accompanied by at least one of the following: a Registered Nurse with special knowledge of the patient's care needs; a certified Respiratory Therapist; a licensed physician; or, any licensed health care professional designated by the transferring physician.

(4) Additional Required Training for Certified/Licensed Paramedics: Evidence of successful completion of post-paramedic training and appropriate periodic skills verification in management

of patients on ventilators, 12 lead EKG and/or other critical care monitoring devices, drug infusion pumps, and cardiac and/or other critical care medications, or any other specialized procedures or devices determined at the discretion of the provider's medical director.

If available, a specialty transport team should be used to transport critically ill or injured children.

**Equipment:** Choosing the type of transport team (i.e. ALS, MICU, and/or specialty team) can be challenging given our state's rural nature as well as geographic obstacles. The following gives a synopsis of what type of patient can/should be transferred according to their level of care. At all times, the referring institution should be knowledgeable about the transport mode's pediatric capabilities, especially in regards to pediatric equipment on-board. If they do not have a specific item on-board (example: pediatric nebulizer) then the referring institution must ensure the patient leaves their facility with the needed piece of equipment.

**Communication:**

1. Both the referral (sending) and receiving (accepting) institution should have policies regarding hospital-to-hospital communication in regards to:

- Work-up required or not required prior to transport (i.e. CT scan),
- Helping the referral institution determine mode/method of transport (i.e. air vs ground) and
- Patient stabilization requirements for transport.
- Communication back to the receiving institution in regards to:
  - Patient arrival at the receiving institution with updated patient health status
  - Overall patient outcome
  - The ability to discuss any patient care specifics enabling both facilities to optimize patient care for future transfers.

**Back-transfer:**

The referring institution needs to be prepared for those patients requiring long-term or chronic care post injury/illness. Back-transfer is encouraged if the referring institution has the capability to care for the pediatric patient in the inpatient setting.

**The method of transport:**

The method of transport is dependent on the variables listed below. Air transport, either by fixed wing (airplane) or rotary wing (helicopter) is typically utilized when speed is critical, long distances are involved, and/or a specialty team is required and available for patient care. However, there are circumstances where taking an ALS unit out of a community, for example, renders the community without an advanced life support unit for a prolonged period of time. Therefore, in this situation, use of air medical transport may be required so as not to endanger the rest of the community.

The following guidelines will help the provider to determine which type of transport method to utilize when transferring a critically ill or injured child. This can also be divided into categories when assessing the method of transfer (ground vs air) as well as crew composition. (Per NHTSA April 2006 guidelines)

1. The availability of critical care and/or specialty care transport teams within a reasonable proximity.
2. The modes of transportation and/or transport personnel available as options in the particular geographic area.
3. Specific circumstances associated with the particular transport situation (e.g. inclement weather, major media event, etc.)

4. Anticipated response time of the most appropriate team and/or personnel.
5. Established state, local, and individual transfer service standards and/or requirements.
6. Combined level of expertise and specific duties/responsibilities of the individual transporting team members.
7. Degree of supervision required by and available to the transporting team members.
8. Complexity of the patient's condition.
9. Anticipated degree of progression of the patient's illness/injury prior to and during transport.
10. Technology and/or special equipment to be used during transport.
11. Scope-of-practice of the various team members

### **Transport Team Configuration: Patient factors**

The referring facility needs to determine the risk for deterioration of the pediatric patient in order to determine the crew composition and ultimately, the method of transport. According to the National Highway Traffic Safety Administration (NHTSA) guidelines from April 2006, the following categories for risk are utilized. The desired team configuration is based on the NHTSA guidelines and adapted for pediatrics:

#### **Stable with no risk for deterioration**

##### **Basic Life Support:**

Oxygen, monitoring of vital signs, saline lock at the discretion of medical control

#### **Stable with low/medium risk of deterioration**

**Advanced Life Support or MICU as defined by Texas Health and Safety Code rule 157.11 with consideration for use of Pediatric Transport Team based on the patient's underlying medical condition and reason for transfer:**

Running IV, some IV medications including pain medications, pulse oximetry, increased need for assessment and interpretation skills, 3-lead EKG monitoring, basic cardiac medications, e.g., heparin or nitroglycerine

## **Stable with high risk of deterioration or Unstable**

**Use of Pediatric Transport Team highly encouraged when available in the following patient situations:**

- advanced airway management required; secured airways, intubated, on ventilator
- multiple vasoactive medication drips,
- condition has been initially stabilized, but has likelihood of deterioration, based on assessment or knowledge of provider regarding specific illness/injury,
- cannot be stabilized at the transferring facility,
- condition deteriorating or likely to deteriorate, such as patients who require invasive monitoring, balloon pump,
- post-resuscitation, or who have sustained multiple trauma.

Strong consideration for air medical transport or critical care ground transport is recommended when pediatric transport team is unavailable

**APPENDIX B: Recommended Medication, Equipment, and Supplies**





# Pediatric Readiness in the Emergency Department

This checklist is based on the American Academy of Pediatrics (AAP), American College of Emergency Physicians (ACEP), and Emergency Nurses Association (ENA) 2018 joint policy statement “Pediatric Readiness in the Emergency Department,” which can be found online at:

<https://pediatrics.aappublications.org/content/pediatrics/142/5/e20182459.full.pdf>.

Use this tool to check if your hospital emergency department (ED) has the most critical components listed in the joint policy statement.

## Administration and Coordination of the ED for the Care of Children

- Physician Coordinator for Pediatric Emergency Care (PECC)\*
  - Board certified/eligible in EM or PEM (preferred but not required for resource limited hospitals)
  - The Physician PECC is not board certified in EM or PEM but meets the qualifications for credentialing by the hospital as an emergency clinician specialist with special training and experience in the evaluation and management of the critically ill child.
- Nurse Coordinator for Pediatric Emergency Care (PECC)\*
  - CPEN/CEN (*preferred*)
  - Other credentials (e.g., CPN, CCRN)

\* *An Advanced Practice Provider may serve in either of these roles. Please see the guidelines/toolkit for further definition of the role(s).*

## Physicians, Advanced Practice Providers (APPs), Nurses, and Other ED Healthcare Providers

- Healthcare providers who staff the ED have periodic pediatric-specific competency evaluations for children of all ages. Areas of pediatric competencies include any/all of the following:
  - Assessment and treatment (e.g., triage)
  - Medication administration
  - Device/equipment safety
  - Critical procedures
  - Resuscitation
  - Trauma resuscitation and stabilization
  - Disaster drills that include children
  - Patient- and family-centered care
  - Team training and effective communication

## Guidelines for QI/PI in the ED

- The QI/PI plan includes pediatric-specific indicators
  - Data are collected and analyzed
  - System changes are implemented based on performance
  - System performance is monitored over time

*Please see the guidelines/toolkit for additional details.*

## ED Policies, Procedures, and Protocols

Policies, procedures, and protocols for the emergency care of children. *These policies may be integrated into overall ED policies as long as pediatric-specific issues are addressed.*

- Illness and injury triage
- Pediatric patient assessment and reassessment
- Identification and notification of the responsible provider of abnormal pediatric vital signs
- Immunization assessment and management of the under-immunized patient
- Sedation and analgesia, for procedures including medical imaging
- Consent, including when parent or legal guardian is not immediately available
- Social and behavioral health issues
- Physical or chemical restraint of patients
- Child maltreatment reporting and assessment
- Death of the child in the ED
- Do not resuscitate (DNR) orders
- Children with special health care needs
- Family and guardian presence during all aspects of emergency care, including resuscitation
- Patient, family, guardian, and caregiver education
- Discharge planning and instruction
- Bereavement counseling
- Communication with the patient’s medical home or primary care provider as needed.
- Telehealth and telecommunications

## All-Hazard Disaster Preparedness

The written all-hazard disaster-preparedness plan addresses pediatric-specific needs within the core domains including:

- Medications, vaccines, equipment, supplies and trained providers for children in disasters
- Pediatric surge capacity for injured and non-injured children
- Decontamination, isolation, and quarantine of families and children of all ages
- Minimization of parent-child separation
- Tracking and reunification for children and families
- Access to specific behavioral health therapies and social services for children
- Disaster drills include a pediatric mass casualty incident at least every two years
- Care of children with special health care needs

## Evidence-Based Guidelines

- Evidence-based clinical pathways, order sets or decision support available to providers in real time

## Inter-facility Transfers

- Written pediatric inter-facility transfer agreements
- Written pediatric inter-facility transfer guidelines. These may include:
  - Criteria for transfers (e.g., specialty services)
  - Criteria for selection of appropriate transport service
  - Process for initiation of transfer
  - Plan for transfer of patient information
  - Integration of family-centered care
  - Integration of telehealth/telecommunications

## Guidelines for Improving Pediatric Patient Safety

Pediatric patient and medication safety needs are addressed in the following ways:

- Children are weighed in kilograms only
- Weights are recorded in kilograms only
- For children who require emergency stabilization, a standard method for estimating weight in kilograms is used (e.g., a length-based system)
- Infants and children have a full set of vital signs recorded
  - A full set of vital signs includes temperature, heart rate, respiratory rate, pulse oximetry, blood pressure, pain, and mental status when indicated in the medical record
- CO<sup>2</sup> monitoring for children of all ages
- Process for safe medication delivery that includes:
  - Prescribing
  - Administration
  - Disposal
- Pre-calculated drug dosing and formulation guides
- 24/7 access to interpreter services in the ED
- Timely tracking and reporting of patient safety events

## Guidelines for ED Support Services

- Medical imaging capabilities and protocols address age- or weight-appropriate dose reductions for children
- All efforts made to transfer completed images when a patient is transferred from one facility to another
- Collaboration with radiology, laboratory and other ED support services to ensure the needs of children in the community are met

*Please see the guidelines/toolkit for additional details*

## Guidelines for Medication, Equipment and Supplies

Pediatric equipment, supplies, and medications are appropriate for children of all ages and sizes (see list below), and are easily accessible, clearly labeled, and logically organized.

- ED staff is educated on the location of all items
- Daily method in place to verify the proper location and function of pediatric equipment and supplies
- Medication chart, length-based tape, medical software, or other systems is readily available to ensure proper sizing of resuscitation equipment and proper dosing of medications
- Standardized chart or tool used to estimate weight in kilograms if resuscitation precludes the use of a weight scale (e.g., length-based tape)

## Medications

- Analgesics (oral, intranasal, and parenteral)
- Anesthetics (eutectic mixture of local anesthetics; lidocaine 2.5% and prilocaine 2.5%; lidocaine, epinephrine, and tetracaine; and LMX 4 [4% lidocaine])
- Anticonvulsants (benzodiazepines, levetiracetam, valproate, carbamazepine, fosphenytoin, and phenobarbital)
- Antidotes (common antidotes should be accessible to the ED, e.g., naloxone)
- Antipyretics (acetaminophen and ibuprofen)
- Antiemetics (ondansetron and prochlorperazine)
- Antihypertensives (labetalol, nicardipine, and sodium nitroprusside)
- Antimicrobials (parenteral and oral)
- Antipsychotics (olanzapine and haloperidol)
- Benzodiazepines (midazolam and lorazepam)
- Bronchodilators
- Calcium chloride and/or calcium gluconate
- Corticosteroids (dexamethasone, methylprednisolone, and hydrocortisone)
- Cardiac medications (adenosine, amiodarone, atropine, procainamide, and lidocaine)
- Hypoglycemic interventions (dextrose, oral glucose)
- Diphenhydramine
- Epinephrine (1mg/mL [1M] and 0.1 mg/mL [IV] solutions)
- Furosemide
- Glucagon
- Insulin
- Magnesium sulfate
- Intracranial hypertension medications (mannitol, 3% hypertonic saline)
- Neuromuscular blockers (rocuronium and succinylcholine)
- Sucrose solutions for pain control in infants
- Sedation medications (midazolam, etomidate and ketamine)
- Sodium bicarbonate (4.2%)
- Vasopressor agents (dopamine, epinephrine and norepinephrine)
- Vaccines (tetanus)

### Equipment/Supplies: General Equipment

- Patient warming device (infant warmer)
- IV blood and/or fluid warmer
- Restraint device
- Weight scale, in kilograms only (no opportunity to weigh or report in pounds), for infants and children
- Tool or chart that relies on weight (kilograms) used to assist physicians and nurses in determining equipment size and correct drug dosing (by weight and total volume)
- Pain scale assessment tools that are appropriate for age
- Rigid boards for use in CPR
- Pediatric-specific AED pads

### Equipment/Supplies: Vascular Access

#### Arm boards

- infant
- child
- Atomizer for intranasal administration of medication

#### Catheter-over-the-needle device

- 22 gauge
- 24 gauge

#### Intraosseous needles or device

- pediatric
- IV administration sets with calibrated chambers and extension tubing and/or infusion devices with the ability to regulate the rate and volume of infusate (including low volumes)

#### IV solutions

- Normal saline
- Dextrose 5% in 0.45% normal saline
- Lactated Ringer's solution
- Dextrose 10% in water

### Equipment/Supplies: Fracture-Management Devices

#### Extremity splints (including femur splints)

- pediatric

#### Cervical Collar

- infant
- child

### Equipment/Supplies: Monitoring Equipment

#### Blood pressure cuffs

- neonatal
- infant
- child
- Doppler ultrasonography devices
- ECG monitor and/or defibrillator with pediatric and adult capabilities, including pediatric-sized pads and/or paddles
- Pulse oximeter with pediatric and adult probes
- Continuous end-tidal CO<sub>2</sub> monitoring

### Equipment/Supplies: Respiratory

#### Endotracheal Tubes

- uncuffed 2.5 mm
- uncuffed 3.0 mm
- cuffed or uncuffed 3.5 mm
- cuffed or uncuffed 4.0 mm
- cuffed or uncuffed 4.5 mm
- cuffed or uncuffed 5.0 mm
- cuffed or uncuffed 5.5 mm
- cuffed 6.0 mm

#### Feeding Tubes

- 5F
- 8F

#### Laryngoscope Blades

- straight: 0
- straight: 1
- straight: 2
- curved: 2

#### Magill Forceps

- pediatric

#### Nasopharyngeal Airways

- infant
- child

#### Oropharyngeal Airways

- size 0
- size 1
- size 2
- size 3

#### Stylets for endotracheal tubes

- pediatric
- infant

#### Suction Catheters

- infant (6-8F)
- child (10-12F)

#### Rigid Suction Device

- pediatric

#### Bag-mask device, self-inflating

- infant (250 ml)
- child (450-500 ml)

#### Non-rebreather masks

- infant
- child

#### Clear Oxygen masks

- infant
- child

#### Masks to fit bag-mask device adaptor

- neonatal
- infant
- child

#### Nasal cannula

- infant
- child

#### Gastric tubes

- infant (8F)
- child (10F)

### Equipment/Supplies: Specialized Pediatric Trays or Kits

#### Difficult airway supplies and/or kit

*Contents to be based on pediatric patients served at the hospital and may include some or all of the following:*

- supraglottic airways of all sizes
- needle cricothyrotomy supplies
- surgical cricothyrotomy kit
- video laryngoscopy

#### Newborn delivery kit (including equipment for initial resuscitation of a newborn infant)

- umbilical clamp
- scissors
- bulb syringe
- towel

#### Urinary catheterization kits and urinary (indwelling) catheters

- infant
- child

## Additional Recommendations for High-Volume EDs (>10,000 Pediatric Patient Visits per Year)

- Alprostadil (prostaglandin E1)

### Central venous catheters

- 4.0F  
 5.0F  
 6.0F  
 7.0F

### Chest tubes

- infant (8–12F catheter)  
 child (14–22F catheter)  
 adult (24–40F catheter) OR  
pigtail catheter kit (8.5–14F catheter)
- Hypothermia thermometer
- Inotropic agents (e.g., digoxin and milrinone)

### Laryngoscope blade

- size 00

### Lumbar puncture tray, spinal needles

- infant  
 child

### Noninvasive ventilation

- continuous positive airway pressure OR high-flow nasal cannula

### Self-inflating bag-mask device

- pediatric
- Tube thoracostomy tray

### Tracheostomy tubes

- size 0  
 size 1  
 size 2  
 size 3  
 size 4  
 size 5  
 size 6

### Umbilical vein catheters

- 3.5F  
 5.0F
- Video laryngoscopy


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American Academy  
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

American College of  
Emergency Physicians®  
ADVANCING EMERGENCY CARE 

**ENA**  
EMERGENCY NURSES  
ASSOCIATION

 **EIIIC**  
Emergency Medical Services for Children  
Innovation and Improvement Center

**APPENDIX C: Behavioral Health Resources**

- **2-1-1 Texas:** A program of the Texas Health and Human Services Commission, is committed to helping Texas citizens connect with the services they need. Whether you need help finding food or housing, childcare, crisis counseling or substance abuse treatment, one number is all you need to know. For more information: <https://www.211texas.org/>
- **988 Suicide and Crisis Lifeline:** The 988 Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for you or your loved ones, and best practices for professionals in the United States. For more information: <https://988lifeline.org/>
- **Addressing Mental Health Concerns in Pediatrics: A Practical Resource Toolkit for Clinicians, 2nd edition:** <https://publications.aap.org/toolkits/pages/mental-health-toolkit?autologincheck=redirected>
- **American Academy of Pediatrics (AAP) Mental Health Practice Tools and Resources:** <https://www.aap.org/en/patient-care/mental-health-initiatives/mental-health-practice-tools-and-resources/>
- **Critical Crossroads: Pediatric Mental Health Care in the Emergency Department: A Care Pathway Resource Toolkit:** <https://emscimprovement.center/education-and-resources/toolkits/critical-crossroads-pediatric-mental-health-care-ed/>
- **EMS for Children Innovation and Improvement Center (EIIIC) Pediatric Education and Advocacy Kit (PEAK): Agitation:** <https://emscimprovement.center/education-and-resources/peak/pediatric-agitation/>
- **EMS for Children Innovation and Improvement Center (EIIIC) Pediatric Education and Advocacy Kit (PEAK): Suicide:** <https://emscimprovement.center/education-and-resources/peak/pediatric-suicide-screening-mental-health/>
- **Substance Abuse and Mental Health Services Administration (SAMHSA) Psychological First Aid:** <https://www.samhsa.gov/resource/dbhis/psychological-first-aid-online>
- **Local Intellectual and Developmental Disability Authorities Directory: Texas Department of Health and Human Services:** <https://apps.hhs.texas.gov/contact/la.cfm>
- **Local Mental Health Crisis Authority: Texas Department of Health and Human Services:** <https://www.hhs.texas.gov/services/mental-health-substance-use/mental-health-crisis-services>
- **The State of Texas Crisis Intervention Team:** <https://www.texascit.org/index.php>

**APPENDIX D: Resources for Children with Special Healthcare Needs/Children with Functional Access Needs Resources**

- **2-1-1 Texas:** A program of the Texas Health and Human Services Commission, is committed to helping Texas citizens connect with the services they need. Whether you need help finding food or housing, childcare, crisis counseling or substance abuse treatment, one number is all you need to know. For more information: <https://www.211texas.org/>
- **American Academy of Pediatrics (AAP): Disaster Preparedness for Children and Youth with Special Healthcare Needs:** <https://www.aap.org/en/patient-care/disasters-and-children/professional-resources-for-disaster-preparedness/preparedness-for-children-and-youth-with-special-health-care-needs/>
- **EMS for Children Innovation and Improvement Center (EIIC): Children and Youth with Special Healthcare Needs Toolkit:** [https://emscimprovement.center /domains /preparedness /asprcoe/eglpcdr/cyshcn/](https://emscimprovement.center/domains/preparedness/asprcoe/eglpcdr/cyshcn/)
- **EMS for Children Innovation and Improvement Center (EIIC): Patient, Family, and Provider Preparedness:** [https://emscimprovement.center/domains/preparedness /asprcoe/eglpcdr/cyshcn/toolkit/](https://emscimprovement.center/domains/preparedness/asprcoe/eglpcdr/cyshcn/toolkit/)
- **EMS for Children Innovation and Improvement Center (EIIC): Be Ready: Tips for Families of Children and Youth with Special Healthcare Needs:** <https://emscimprovement.center/domains/preparedness/asprcoe/eglpcdr/cyshcn/toolkit/>
- **Texas Health and Human Services: Emergency Preparedness for Families with Children with Special Healthcare Needs:** <https://www.dshs.texas.gov/maternal-child-health/programs-activities-maternal-child-health/cshcn-systems-development-group/emergency-preparedness-families-children>
- **Texas Parent to Parent:** Provides support, information, and education for families of children and adults with disabilities, chronic and mental health conditions, and other health care needs.: <https://www.txp2p.org/>
- **Texas Family Voice Network:** a diverse collaboration of family members, community members, state agency representatives, family run organizations and other stakeholder groups, united to provide one common voice to promote successful outcomes for children’s mental and behavioral health.: <https://txfvn.org/>



**APPENDIX E: Sign In Sheet**

## FAMILY RECEPTION CENTER PLAN

### FRC Child Care Area Check-in Form

**Instructions:** Please complete this form and agreement to help us provide a safe and secure environment

Child Information			
Last:	First:	Middle/ Nickname:	
Age:	Gender:	Identifying Marks and/or Scars:	
Allergies: <input type="checkbox"/> Yes <input type="checkbox"/> No (specify)		Medical Condition: <input type="checkbox"/> Yes <input type="checkbox"/> No (specify)	
Comments:			
Responsible Adult Information			
Last:	First:	Middle/Maiden/Nickname:	
Legal Guardian: <input type="checkbox"/> Yes <input type="checkbox"/> No		If no, who?	
Relationship to child:	<input type="checkbox"/> Parent <input type="checkbox"/> Grandparent <input type="checkbox"/> Extended Family <input type="checkbox"/> Guardian <input type="checkbox"/> Friend <input type="checkbox"/> Other(Please explain):		
Cell number:		Other contact:	
Address:			
City:		State:	Zip:

**Please initial if you agree to these rules of the FRC Child Care Center**

	I agree to remain in this location while my child is in the FRC child care area and I can be reached by phone or text.
--	--

**Authorization of release to another adult**

*Only authorized adults can pick up children and they must present valid photo identification. For the safety of your child, no exceptions will be made.*

I, \_\_\_\_\_, hereby authorize the staff of the hospital FRC Child Care Center to release my child to the adult that I have listed on this sheet.

Last:	First:	Middle/Maiden/Nickname:	
Relationship to child:	<input type="checkbox"/> Parent <input type="checkbox"/> Grandparent <input type="checkbox"/> Extended Family <input type="checkbox"/> Guardian <input type="checkbox"/> Friend <input type="checkbox"/> Other(Please explain):		
Address:			
Cell number:		Other contact:	

\_\_\_\_\_  
Signature of responsible adult

\_\_\_\_\_  
Date

**APPENDIX F: After Action Report**

# [Exercise Name]

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## After-Action Report/Improvement Plan

[Date]

The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.

## EXERCISE OVERVIEW

<b>Exercise Name</b>	[Insert the formal name of exercise, which should match the name in the document header]
<b>Exercise Dates</b>	[Indicate the start and end dates of the exercise]
<b>Scope</b>	This exercise is a [exercise type], planned for [exercise duration] at [exercise location]. Exercise play is limited to [exercise parameters].
<b>Focus Area(s)</b>	[Prevention, Protection, Mitigation, Response, and/or Recovery]
<b>Capabilities</b>	[List the capabilities being exercised]
<b>Objectives</b>	[List exercise objectives]
<b>Threat or Hazard</b>	[List the threat or hazard (e.g. natural/hurricane, technological/radiological release)]
<b>Scenario</b>	[Insert a brief overview of the exercise scenario, including scenario impacts (2-3 sentences)]
<b>Sponsor</b>	[Insert the name of the sponsor organization, as well as any grant programs being utilized, if applicable]
<b>Participating Organizations</b>	[Insert a brief summary of the total number of participants and participation level (i.e., Federal, State, local, Tribal, non-governmental organizations (NGOs), and/or international agencies). Consider including the full list of participating agencies in Appendix B. Delete Appendix B if not required.]
<b>Point of Contact</b>	[Insert the name, title, agency, address, phone number, and email address of the primary exercise POC (e.g., exercise director or exercise sponsor)]

## ANALYSIS OF CAPABILITIES

Aligning exercise objectives and capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned capabilities, and performance ratings for each capability as observed during the exercise and determined by the evaluation team.

Objective	Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
[Objective 1]	[Capability]				
[Objective 2]	[Capability]				
[Objective 3]	[Capability]				
[Objective 4]	[Capability]				

Table 1. Summary of Core Capability Performance

### Ratings Definitions:

**Performed without Challenges (P):** The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

**Performed with Some Challenges (S):** The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

**Performed with Major Challenges (M):** The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

**Unable to be Performed (U):** The targets and critical tasks associated with the capability were not performed in a manner that achieved the objective(s).

The following sections provide an overview of the performance related to each exercise objective and associated capability, highlighting strengths and areas for improvement.

**[Objective 1]**

The strengths and areas for improvement for each capability aligned to this objective are described in this section.

**[Capability 1]****Strengths**

The [full or partial] capability level can be attributed to the following strengths:

**Strength 1:** [Observation statement]

**Strength 2:** [Observation statement]

**Strength 3:** [Observation statement]

**Areas for Improvement**

The following areas require improvement to achieve the full capability level:

**Area for Improvement 1:** [Observation statement. This should clearly state the problem or gap; it should not include a recommendation or corrective action, as those will be documented in the Improvement Plan.]

**Reference:** [List any relevant plans, policies, procedures, regulations, or laws.]

**Analysis:** [Provide a root cause analysis or summary of why the full capability level was not achieved.]

**Area for Improvement 2:** [Observation statement]

**Reference:** [List any relevant plans, policies, procedures, regulations, or laws.]

**Analysis:** [Provide a root cause analysis or summary of why the full capability level was not achieved.]

**[Capability 2]****Strengths**

The [full or partial] capability level can be attributed to the following strengths:

**Strength 1:** [Observation statement]

**Strength 2:** [Observation statement]

**Strength 3:** [Observation statement]

## Areas for Improvement

The following areas require improvement to achieve the full capability level:

**Area for Improvement 1:** [Observation statement. This should clearly state the problem or gap; it should not include a recommendation or corrective action, as those will be documented in the Improvement Plan.]

**Reference:** [List any relevant plans, policies, procedures, regulations, or laws.]

**Analysis:** [Provide a root cause analysis or summary of why the full capability level was not achieved.]



## Appendix A: IMPROVEMENT PLAN

Capability	Issue/Area for Improvement	Corrective Action	Capability Element	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Capability 1: [Capability Name]	1. [Area for Improvement]	[Corrective Action 1]					
Capability 1: [Capability Name]	1. [Area for Improvement]	[Corrective Action 2]					
Capability 1: [Capability Name]	2. [Area for Improvement]	[Corrective Action 1]					
Capability 1: [Capability Name]	2. [Area for Improvement]	[Corrective Action 2]					
Capability 2: [Capability Name]	1. [Area for Improvement]	[Corrective Action 1]					
Capability 2: [Capability Name]	1. [Area for Improvement]	[Corrective Action 2]					
Capability 2: [Capability Name]	2. [Area for Improvement]	[Corrective Action 1]					

Capability 2: [Capability Name]	2. [Area for Improvement]	[Corrective Action 2]					
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This IP is developed specifically for [Organization or Jurisdiction] as a result of [Exercise Name] conducted on [date of exercise].

## APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations
<b>Federal</b>
[Federal Participant]
[Federal Participant]
[Federal Participant]
<b>State</b>
[State Participant]
[State Participant]
[State Participant]
<b>[Jurisdiction A]</b>
[Jurisdiction A Participant]
[Jurisdiction A Participant]
[Jurisdiction A Participant]
<b>[Jurisdiction B]</b>
[Jurisdiction B Participant]
[Jurisdiction B Participant]
[Jurisdiction B Participant]