**Tuolumne-Calaveras**

**Health Care and Safety Coalition (HCSC)**

**Pediatric Surge Annex**

Initial Plan: \_\_\_\_\_\_ 2020 Revised:6/30/21

**Table of Contents**

|  |  |
| --- | --- |
| **Topic** | **Page No.** |
| **1. Introduction**   * 1.1 Purpose * 1.2 Scope * 1.3 Overview/Background of HCC and Situation * 1.4 Access and Functional Needs |  |
| **2. Concept of Operations**   * 2.1 Activation * 2.2 Notifications * 2.3 Roles and Responsibilities * 2.4 Logistics   + 2.4.1 Space   + 2.4.2 Staff   + 2.4.3 Supplies * 2.5 Special Considerations   + 2.5.1 Behavioral Health   + 2.5.2 Decontamination   + 2.5.3 Evacuation   + 2.5.4 Special Pathogens   + 2.5.5 Security   + 2.5.6 Media * 2.6 Operations – Medical Care   + 2.6.1 Triage   + 2.6.2 Treatment * 2.7 Transportation * 2.8 Tracking * 2.9 Reunification * 2.10 Deactivation and Recovery |  |
| **3. Appendices**   * 3.1 Training and Exercises * 3.2 Legal Concerns * 3.3. Pediatric Referral Resources * 3.4 Additional Resources/References |  |

**1. Introduction**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Children represent close to a quarter of the total U.S. population and are particularly vulnerable during disasters. Their unique needs and characteristics make it important to identify and incorporate special considerations for this population into preparedness, response, recovery, and mitigation efforts.

**1.1 Purpose**

This annex applies to a mass casualty event with a large number of pediatric patients. It supports the existing medical surge plans utilized by members of the Tuolumne-Calaveras Health Care and Safety Coalition (TC-HCSC) by addressing specific needs of children and supporting appropriate pediatric medical care during a disaster. This plan is intended to support, not replace, any existing facility or agency policy or plan by providing an assessment of current capabilities, outlining procedures and protocols for responding to a pediatric surge, and suggesting trainings and exercises to improve capabilities.

**1.2 Scope**

This annex was developed during the 2019-2020 grant year to fulfil a requirement of the Hospital Preparedness Program (HPP). All coalition partners were invited to participate in the development of this annex. Participating agencies included:

* Adventist Health Sonora
* Calaveras County Behavioral Health
* Calaveras County Office of Education
* Calaveras County Public Health
* Mark Twain Medical Center
* Tuolumne County Behavioral Health
* Tuolumne County Public Health
* Tuolumne County Superintendent of Schools

We would like to acknowledge and thank the Stanislaus County Healthcare Emergency Preparedness Coalition’s Pediatric Surge Subcommittee for sharing their draft Pediatric Disaster Surge Plan, which was heavily referenced throughout the development of this annex.

Members of the TC-HCSC are trained in the Incident Command System (ICS) and are encouraged to utilize ICS when responding to events such as pediatric surge. This annex does not supersede the plans or authorities of TC-HCSC member entities. Rather, the intent of this annex is to assess the preparedness of the coalition to respond to a pediatric surge event, in addition to documenting processes and procedures.

For this annex, the following pediatric age groups were used by the TC-HCSC Pediatric Surge Working Group to define the pediatric population and determine special age group related considerations:

* Infants: 0 – 12 months
* Toddlers: 1 – 2 years
* Preschoolers: 3 – 5 years
* School aged: 6 – 13 years
* Adolescents: 14 – 18 years

It is important to note that some children with special needs who are over 14 and experience chronic pediatric conditions such as cystic fibrosis, cerebral palsy, and others will likely require specialized attention during a disaster.

**1.3 Overview/Background of HCC and Situation**

The Tuolumne-Calaveras Health Care and Safety Coalition includes the jurisdictions of Tuolumne County and Calaveras County. Health Care Coalitions have existed in each county for a number of years. Core coalition member requirements were introduced in 2017 and one of the new requirements was the participation of at least two acute care hospitals. For this reason, Tuolumne County and Calaveras County combined coalitions in 2017 with Tuolumne County taking the role of the “Lead Coalition” and Calaveras County taking the role of “Subcommittee Coalition.” While the combined Tuolumne-Calaveras Health Care and Safety Coalition plans, meets, trains, and exercises together, each county’s subcommittee of the coalition continues to operate within their own jurisdictions with individual grant and fiscal responsibilities.

Tuolumne and Calaveras Counties are both rural jurisdictions in the central Sierra Nevada range of California. Calaveras County borders Tuolumne County to the north. with one acute care hospital each. In addition to the two hospitals and other healthcare organizations, the coalition includes safety, non-governmental, faith-based, and educational partners, among others. Neither Adventist Health Sonora nor Mark Twain Medical Center have a pediatric unit, neonatal intensive care unit (NICU), or pediatric intensive care unit (PICU) although both hospitals provide Emergency Department services to pediatric patients. Adventist Health Sonora has a labor and delivery unit but Mark Twain Medical Center does not.

Tuolumne and Calaveras Counties lie within the Medical Health Mutual Aid (MHMA) Region IV that includes the counties of Amador, Alpine, El Dorado, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, and Yolo. The table below depicts the pediatric population dispersal of the Region IV MHMA system (population estimates for July 1, 2018).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **County** | **Pediatric (0-5 years) population** | **%** | **Pediatric (0-18 years) population** | **%** | **Total[[1]](#footnote-1) Population** |
| Stanislaus | 39,587 | 7.2 | 149,000 | 27.1 | 549,815 |
| San Joaquin | 53,439 | 7.1 | 203,971 | 27.1 | 752,660 |
| Tuolumne | 2,400 | 4.4 | 9,163 | 16.8 | 54,539 |
| Calaveras | 1,961 | 4.3 | 7,707 | 16.9 | 45,602 |
| Amador | 1,615 | 4.1 | 5,907 | 15.0 | 39,383 |
| Alpine | 44 | 4.0 | 193 | 17.5 | 1,101 |
| El Dorado | 8,771 | 4.6 | 37,754 | 19.8 | 190,678 |
| Sacramento | 98,622 | 6.4 | 363,670 | 23.6 | 1,540,975 |
| Yolo | 12,343 | 5.6 | 46,286 | 21.0 | 220,408 |
| Placer | 20,837 | 5.3 | 87,279 | 22.2 | 393,149 |
| Nevada | 4,287 | 4.3 | 17,048 | 17.1 | 99,696 |
| **Totals** | **243,906** | **5.2** | **927,978** | **20.4** | **3,888,006** |

**1.4 Access and Functional Needs**

Calaveras County Behavioral Health has 139 pediatric patients, while Tuolumne County Behavioral Health served 313 pediatric patients in 2019. It is important to note that these numbers do not include pediatric patients who utilize private providers or other outpatient services for behavioral health services.

Calaveras County has 896 K-12 students and 83 preschool students with Individualized Education Programs. Tuolumne County has 834 K-12 students and 75 preschool students with Individualized Education Programs.

Local risks for pediatric-specific mass casualty events are relatively high. In addition to the youth who reside in the counties, both Tuolumne and Calaveras Counties are home to many youth camps, three state parks, a national park, and countless recreation areas which attract youth from outside the counties.

**2. Concept of Operations** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2.1 Activation**

The California EOM defines an “Unusual Event”, as an incident that significantly impacts or threatens public health, environmental health or emergency medical services. An unusual event may be self-limiting or a precursor to emergency system activation. The specific criteria for an unusual event may include any of the following:

* The incident significantly impacts or is anticipated to impact public health or safety;
* The incident disrupts or is anticipated to disrupt the Public Health and Medical System;
* Resources are needed or anticipated to be needed beyond the capabilities of the Operational Area, including those resources available through existing agreements (day-to-day agreements, memoranda of understanding, or other emergency assistance agreements);
* The incident produces media attention or is politically sensitive;
* The incident leads to a Regional or State request for information; and/or
* Whenever increased information flow from the Operational Area to the State will assist in the management or mitigation of the incident’s impact.

Activation of a pediatric surge is event specific and is based more on patient acuity than the number of patients. For small, rural hospitals with extremely limited pediatric capability, a single gravely injured or ill pediatric patient may trigger a pediatric surge.

**2.2 Notifications**

If a pediatric surge occurs at an acute care hospital in the jurisdiction, the emergency department will notify the House Supervisor and Emergency Department Manager who will then announce the unusual event via the hospital-wide overhead pager. The County Medical Health Operational Area Coordinator (MHOAC) may be notified via EMResource or via phone.

**2.3 Roles and Responsibilities**

A pediatric surge event will be coordinated by the impacted acute care hospital in collaboration with the local ambulance company and Medical Health Operational Area Coordinator (MHOAC). Essential elements of information (EEI) include patient age and acuity.

While neither hospital has a team of pediatric SMEs, Adventist Health Sonora has pediatricians on staff and Mark Twain Medical Center has the ability to utilize telemedicine.

Dr. Richard Johnson, Alpine County Health Officer, is an SME to California Region IV and was instrumental in drafting the California Pediatric Surge Plan.

During an incident with significant numbers of pediatric casualties, resources at health care facilities with pediatric critical care capabilities will quickly become exhausted. Therefore, developing a system that outlines how all health care facilities and supporting entities can assist with providing care to children is crucial to the response. The table below lists the responsibilities of local healthcare facilities and supporting entities.

| **Facility/Entity Type** | **Responsibilities** |
| --- | --- |
| Child Protective Services | Initiate Family Assistance Centers (Calaveras)  Provide staff for Family Assistance Center  Collect victim/casualty information  Provide/coordinate temporary care for unaccompanied minors  Coordinate reunification of families |
| Disaster Control Facility | Initial notifications  Patient dispersal  Tracking patient destinations |
| EMS Agency | Coordinate EMS resources |
| Field Level EMS/First Response | Triage patients  Field decontamination (if needed)  Transport to healthcare facility |
| Hospitals | Triage & treatment  Decontamination (if needed)  Tracking secondary facility transfers  Provide victim/casualty information to FAC POC |
| Law Enforcement | Coordinate with Child Protective Services to ensure the safety of all unaccompanied children  Aid in the identification and reunification of children in disaster |
| MHOAC | Notification of pediatric stakeholders  Coordinate medical health resources  Process medical health mutual aid requests |
| Office of Emergency Services | Assist coordinating requests for Mutual Aid resources |
| Public Health | Develop the Medical Health Situation report  Public Health Officer Local Health Emergency Declaration (if needed) |
| Sheriff | Initiate Family Assistance Centers (Tuolumne)  Notifications to families of victims/casualties  Conduct investigations (if needed) |
| Skilled Nursing Facilities | Respond to bed poll if requested  Provide surge relief to hospital facilities |
| Specialty Clinics (Pediatric) | Provide pediatric consultation services to hospitals |

**2.4 Logistics**

**2.4.1 Space**

Neither Adventist Health Sonora nor Mark Twain Medical Center have designated space to care for pediatric patients. Pediatric patients are typically only cared for in the Emergency Department until they are either released or transferred to a pediatric hospital. In the event of a major pediatric surge, the hospital may need to utilize space outside of the Emergency Department to care for pediatric patients until they can be transferred, if that remains an option.

Goal: Maintain operations and increase capacity to preserve life and the safety of patients and ensure appropriate healthcare delivery to the community.

The following strategies may be used:

| **SPACE** | |
| --- | --- |
| **Strategies** | **Regulatory Considerations** |
| * Utilize licensed space for other types of patients * Use outpatient beds for inpatient care * Use internal skilled beds as acute patient areas * Convert adult space into pediatric space * Convert pediatric space to adult space | * 22 CCR 70811(c): Patient rooms which are approved for ambulatory patients only shall not accommodate non-ambulatory patients * 22 CCR 70805: Spaces approved for specific uses at the time of licensure shall not be converted to other uses without the written approval of CDPH * 22 CCR 70809(a): No hospital shall have more patients or beds set up for overnight use by patients than the approved licensed bed capacity except in the case of justified emergency when temporary permission may be granted by the CDPH Director or designee |
| * Increase capacity in patient rooms or hallways in patient care areas   + Two (2) patients in a single room   + Three (3) patients in a double room | * 22 CCR 70811(a): Patients shall be accommodated in rooms with a minimum floor area (as detailed in 22 CCR 70811 (a) (1) and (a) (2) * 22 CCR 70805: Spaces approved for specific uses at the time of licensure shall not be converted to other uses without the written approval of CDPH * 22 CCR 70809(a): No hospital shall have more patients or beds set up for overnight use by patients than the approved licensed bed capacity except in the case of justified emergency when temporary permission may be granted by the CDPH Director or designee |
| * Open Hospital Floors that are vacant * Use areas of the hospital for inpatients   + GI Lab   + Recovery Room   + Outpatient Surgery   + Physical Therapy   + Other * Use non-traditional areas of the hospital for inpatients   + Cafeterias   + Conference Rooms   + Parking Structures   + Other | * 22 CCR 70805: Spaces approved for specific uses at the time of licensure shall not be converted to other uses without the written approval of CDPH * 22 CCR 70809(c): Patients shall not be housed in areas which have not been approved by CDPH for patient housing and which have not been granted a fire clearance by the State Fire Marshal |
| * Shut off floor ventilation system to make a cohort of infected patients | * 22 CCR 70823: A private room shall be available for any patient in need of physical separation as defined by the infection control committee * 22 CCR 70855: Heating, air conditioning, and ventilation systems shall be maintained in operating condition to provide a comfortable temperature |
| * Use tents to create additional patient care areas | * 22 CCR 70809(c): Patients shall not be housed in areas which have not been approved by CDPH for patient housing and which have not been granted a fire clearance by the State Fire Marshal |
| * Request relaxation of nurse/patient ratios to allow occupancy of all licensed beds | * 22 CCR 70217: Nurse ratios * Union Regulations * AB 294: California RN Staffing Ratio Law, requires Governor’s standby order for statutory suspension |

**2.4.2 Staff**

Since neither hospital has designated pediatric care areas, staff specifically trained in caring for pediatric patients are extremely limited.

Goal: Increase the ability to maintain staffing levels and/or expand the workforce.

It is important to note that, with exception of a pandemic, pediatric surge events at Adventist Health Sonora and Mark Twain Medical Center are expected to be short in duration. The following strategies may be used, although some are only applicable to long term events:

| **STAFF** | |
| --- | --- |
| **Strategies** | **Regulatory Considerations** |
| * Cross train clinical staff | * Age limits to MD Malpractice Coverage |
| * Contact Nurse Staffing Agencies (registries/traveling nurses) to assist with supplemental staffing needs | * None |
| * Use of non-conventional staff or expand scope of practice   + Student nurses   + Medical students   + Military licensed staff | * Regulations to expand clinical professionals’ scope of practice may require a CDPH waiver and a Governor’s order. Need clarification from professional boards. * 22 CCR 70217: Nurse ratios |
| * Use of non-conventional staff   + Volunteers   + Paramedics   + Dentists   + Veterinarians   + Retired health professionals with an active license | * Professionals with inactive licenses will need to go through the process to reactivate it * Liability/licensing regulations * State laws regarding malpractice coverage for granted a fire clearance by the State Fire Marshal volunteers |
| * Utilize pediatric skilled RNs to supervise adult skilled patients and vice versa | * Liability regulations and insurance limitations |
| * Utilize families to render care under direction of a healthcare provider | * Title 22 – Certified nursing assistant to render care |
| * Implement and/or develop just in time training for clinical staff normally assigned to non-direct patient care positions | * None |

Depending on the duration of the pediatric surge, there may or may not be time for just-in-time (JIT) training for staff.

**2.4.3 Supplies**

Since neither hospital has specific pediatric care areas, inventory of pediatric supplies is greatly limited. It is recommended that the hospitals prioritize the following three areas when developing strategies for the allocation of scarce supply and equipment resources:

* Airway
* Breathing
* Circulation

Hospitals should consider making the following categories of supplies and equipment available for use in the emergency department during a pediatric surge event:

|  |  |
| --- | --- |
| **SUPPLIES** | |
| Airway | Oral Pediatric Airway  Nasopharyngeal Airway  Laryngeal Masks  Endotracheal Intubation Tubes  Laryngoscope Blades |
| Breathing | Face Masks  Non-rebreather Masks  Ambu bags  Chest Tubes  Nasogastric Tubes |
| Circulation | Intravenous Supplies  Invasive Mechanical Vents  HFO Ventilators  OR Invasive Mechanical Ventilators  Portable Invasive Mechanical  Non-invasive Ventilators |
| Pediatric Specific | Broselow Bags |
| Broselow Carts |

**Minimal Pediatric Equipment Recommendations for Emergency Departments[[2]](#footnote-2)**

When planning and purchasing pediatric equipment, hospitals should prepare for the number of patients expected based on its anticipated surge in pediatric patients. Each institution must determine what its expected surge capacity for pediatric critical patients is and should adjust inventory according to the number of patients for which it will plan.

The following recommendations suggest specific equipment emergency departments should keep on hand per **one** critical pediatric patient of unknown age or size.

| **Equipment Type** | **Size/Type** | **Quantity** | **Importance**  **E = Essential**  D= Desirable |
| --- | --- | --- | --- |
| Ambu Bags | Infant | 2 | **E** |
| Child | 2 | **E** |
| Arm Boards |  | 2 | D |
| Blood Pressure Cuffs | Infant/Small Child | 1 | **E** |
| Chest Tubes | Sizes 12F, 16F, 20F, 24F, 28F | 2 Each size | **E** |
| Dosing Chart, Pediatric |  | 1 | **E** |
| ETCO2 Detectors (Pediatric, Disposable) |  | 2 | **E** |
| ET Tubes | Sizes 2.5mm-6.5mm | 6 Each size | D |
| Foley Catheters | Sizes 8F, 10F, 12F | 6 Each size | D |
| Gastronomy Tubes | Sizes 12F, 14F, 16F | 2 Each size | D |
| Infant Scale |  | 1 for several patients | D |
| Intraosseous Needles |  | 8 | **E** |
| Intravenous Infusion Pumps |  | 1 | D |
| Laryngoscope Blades | Macintosh 0, 1, 2 | 2 Each size | **E** |
| Miller 001, 2 |
| Laryngoscope Handles (pediatric) |  | 2 | **E** |
| Masks: Face Masks, clear self-inflating bag (500cc)  Non-Rebreather | Infant | 10 | **E** |
| Child | 10 | **E** |
| Infant | 10 | **E** |
| Child | 2 | **E** |
| Nasal Cannula | Infant | 2 Each size | **E** |
| Child |
| Nasogastric Tubes | Sizes 6F,8F, 10F,12F, 14F, 16F | 10 Each size | **E** |
| Nasopharyngeal Airways | All pediatric sizes | 1 Each size | D |
| Newborn Kit/Obstetric/ delivery kit |  | 1 | **E** |
| Oral Airways | All pediatric sizes 00, 01 | 2 Each size | **E** |
| Over-the-needle intravenous catheters | Angiocatheter |  | D |
| Sizes 20, 22, 24 | **E** |
| Restraining Board (pediatric) |  | 1 | D |
| Broselow Resuscitation Tape, Length-based |  | 2 | **E** |
| Seldinger Technique Vascular Access Kit | Sizes 4F, 5F | 2 Each size | D |
| Catheters, 15cm length |
| Semi-rigid Cervical Spine Collars | Infant | 2 | **E** |
| Small Child | 2 | **E** |
| Child | 2 | **E** |
| Suction Catheters | 5F, 8F | 5 Each size | **E** |
| Syringes | 60cc, catheter tip (for use with gastronomy tube) | 2 | **E** |
| Warming Device (overhead warmer for newborns) |  | 1 | D |
| Tracheostomy Tubes | Sizes 00 to 6 | 2 Each size (per ED not per Patient) | **E** |

**Minimal Pediatric Equipment Recommendations for Pre-hospital Providers**

Pre-hospital ambulance providers that operate in Calaveras and Tuolumne counties carry a standard inventory of medical equipment and supplies on each Advanced Life Support (ALS) and Basic Life Support (BLS) vehicles.

**2.5 Special Considerations**

**2.5.1 Behavioral Health**

Children may respond to disaster and hospitalization in similar ways to adults, but will also experience, mediate, and communicate trauma in unique ways characteristic of their developmental levels. Hospital staff should consider this when helping children cope with their hospital visit after a disaster. Staff can help children feel safer in the unfamiliar environment of a hospital by including familiar people, things and routines. Hospitals should also prepare staff for the different ways culture impacts a child’s response to trauma.

**2.5.1.A** **Developmental Level-Specific Guidelines for Treating Children in the Hospital**

**2.5.1.A.1 Infants**

* Let a parent or caregiver stay with and, when possible, hold the infant during medical procedures
* Use familiar objects from the baby’s home such as stuffed animals, blankets, music boxes or toys for comfort before, during and/or after a procedure

**2.5.1.A.2 Toddlers and Preschool-aged Children**

* Avoid discussing toddler or preschoolers’ care in their presence unless you include them in the conversation. Children overhear much more than adults realize and, without any explanation, information may seem terribly frightening.
* Let a parent or caregiver stay overnight with the child if possible and let other family members, including brothers and sisters, visit (if appropriate).
* Reassure the child that the hospitalization is not a punishment. Avoid applying good or bad labels to the child, particularly during a procedure. For example, instead of saying “See, you were so good, the doctor only had to do this once,” you can say, “You did such a good job of sitting still, I know that was hard.”
* Allow children to handle medical equipment such as stethoscopes, blood pressure cuffs, etc. and to practice procedures on a doll. Children learn best through play— “medical play” can be particularly useful.
* Allow the child to make choices whenever possible, but don’t offer a choice when none exist. For example, do not say, “Would you like to come into the treatment room now, so the doctor can look at you?” Instead say, “Do you want to bring your bear or blanket with you to the treatment room?”

**2.5.1.A.3 School-Aged Children**

* You can give school-aged children more specific information about what they will experience; however, many medical terms can be confusing. For example, the term "I.V." could be confused with the word “ivy,” or “dye” with “die.” Give simple, specific explanations for procedures and use non-technical language.
* This is a great age for medical play (communicating understanding, fears, etc. through play with medical equipment). Let the child reenact events through play with different kinds of toys or art materials. This will help school-aged children express their feelings and gain a sense of control over what is happening to them.
* Encourage all staff to respect the child's privacy by knocking before entering his or her room and by being sensitive to who is around when examinations are in progress.
* Children this age may regress or revert to behaviors that they had outgrown (thumb sucking, bed wetting, etc.) during stressful situations such as hospitalization. Do not berate (e.g., say, “come on, you’re a big girl now…”) or punish children for such behavior; instead encourage them to express their feelings and discharge emotions through play.

**2.5.1.A.4 Adolescents**

* Avoid discussing teenagers’ care in their presence unless they are included in the conversation. Adolescents can understand much more about their bodies and what is happening to them than younger children and may resent being excluded from discussions.
* Do not assume that teens manage their emotions the same way as adults. Give teens opportunities to talk to staff about what is happening and to ask questions, both with and without parents or caregivers present.
* Encourage all staff to respect teens’ privacy by knocking before entering exam rooms and by being sensitive to who is around during examinations.
* Adolescents are particularly concerned about body image and do not want to be perceived as “different” than peers because of an illness or injury. Be especially sensitive to the physical changes adolescents may experience when explaining any procedures, injuries or treatments.

**2.5.1.B How to Help Children During and After a Disaster**

There are many ways to help children both before and during a disaster, especially if their age is considered.

**2.5.1.B.1 Children Younger than Five Years of Age**

* Maintain their normal routines and favorite rituals as much as possible.
* Limit exposure to TV programs and adult conversations about the events.
* Ask what makes them feel better.
* Give plenty of hugs and physical reassurance.
* Provide opportunities for them to be creative and find other ways to express themselves.

**2.5.1.B.2 Children Older than Five Years of Age**

* Don’t be afraid to ask them directly what is on their minds 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.
* Encourage expression, verbally and through play, of thoughts and feelings.
* Listen to their repeated retellings of the event.

**2.5.1.C When to Consult a Mental Health Professional**

Seek psychiatric consultation if children exhibit any of the following behaviors:

* Excessive fear of something terrible happening to their parents or loved ones
* Excessive and uncontrollable worry about unfamiliar people, places or activities
* Fear of not being able to escape if something goes wrong
* Suicidal thoughts or the desire to hurt others
* Hallucinations
* Feelings of being helpless, hopeless or worthlessness

**2.5.2 Decontamination**

The following recommendations are intended to facilitate decontamination of all children presenting to a hospital during a disaster in a timely manner. Children require special considerations that may not be addressed in a general Hospital Decontamination Plan.

**2.5.2.A General Guidelines**

Infants and children have unique needs that require special consideration during the process of hospital-based decontamination, such as:

* Avoiding separation of families during the decontamination process
* Older children may resist or be difficult to handle due to fear, peer pressure and modesty issues
* Since parents or caregivers may not be able to decontaminate both themselves and their children at the same time, decontamination personnel may need to assist them
* Incorporating high-volume, low pressure water delivery systems that are “child-friendly” into the hospital decontamination showers
* Risk of hypothermia increases proportionally in smaller, younger children when the water temperature in the decontamination shower is below 98°F
* Attention to airway management, a priority in decontamination showers
* The smaller the child, the bigger the problem regarding any of the above considerations

**2.5.2.B Decontamination Recommendations Based on Child’s Age**

The following recommendations are based on the child’s estimated age of appearance, since asking may be impractical due to the limitations of personal protective equipment (PPE) and or due to a large influx of patients. These recommendations are divided into three groups by ages – infants and toddlers (0-2 years), preschool children (2-8 years), and school aged children and adolescents (8-18 years).

**2.5.2.B.1 Infants and Toddlers (0-2 years)**

Infants and toddlers are the most challenging group to treat; special needs considerations are of the utmost importance in this group. Follow the guidelines below during treatment.

* All infants and toddlers should be placed on a stretcher and undressed by either the child’s caregiver or hospital decontamination personnel. All clothes and items should be placed in appropriate containers or bags provided by the hospital and labeled.
* Each child should then be accompanied through the decontamination shower by either the child’s caregiver or hospital decontamination personnel to ensure that the patient is properly and thoroughly decontaminated. It is not recommended that the child be separated from family members or adult caregivers. **Caregivers should not carry the child because of the possibility of injury from a fall, or from dropping a slippery and squirming child.**  Special attention must be given to the child’s airway while in the shower.
* Non-ambulatory children should be placed on a stretcher by hospital decontamination personnel and undressed (using trauma shears if necessary). All clothes and items that cannot be decontaminated (glasses, hearing aids, or other devices) should be placed in appropriate containers or bags as provided by the hospital and labeled.
* All non-ambulatory children should then be escorted through the decontamination shower by either the child’s caregiver or decontamination personnel to ensure the patient is properly and thoroughly decontaminated. Special attention must be paid to the child’s airway while in the shower.
* Once through the shower, the child’s caregiver or post-decontamination personnel will be given a towel and sheets to dry off the child, and a hospital gown. The child should immediately be given a unique identification number on a wristband and then triaged to an appropriate area for medical evaluation.
* Children and their parents or caregivers should not be separated unless critical medical issues take priority.

**2.5.2.B.2 Preschool-Aged Children (2-8 years)**

Children ages two to eight years can walk and speak, yet (with considerable variations in physical characteristics), are clearly children.

* Ambulatory children should be assisted in undressing with help from either the child’s caregiver or hospital decontamination personnel. All clothes and items that cannot be decontaminated should be placed in appropriate containers or bags as provided by the hospital and labeled.
* Each child should be directly accompanied through the shower by either the child’s caregiver or hospital decontamination personnel to ensure the entire patient is properly and thoroughly decontaminated. The child should not be separated from family members or the adult caregiver.
* Non-ambulatory children should be placed in a stretcher by hospital decontamination personnel and undressed (using trauma shears if necessary). All clothes and items that cannot be decontaminated should be placed in appropriate containers or bags as provided by the hospital and labeled.
* Each non-ambulatory child on a stretcher should be escorted through the decontamination shower and assisted with decontamination to ensure the patient is thoroughly and properly decontaminated.
* Once through the shower, each child should be given a towel and sheets to dry themselves, and a hospital gown. The child should immediately be given a unique identification number on a wristband and then triaged to an appropriate area for medical evaluation.
* Children and their parents or caregivers should not be separated unless critical medical issues take priority.

**2.5.2.B.3 School-Aged Children and Adolescents (8-18 years)**

At the age of eight years and older, children’s airway anatomy approximates that of an adult. Although it is tempting to regard this age group as “small adults” there are special needs unique to this age group.

* Ambulatory children should undress as instructed by hospital decontamination personnel. All clothes and items that cannot be decontaminated should be placed in appropriate containers or bags as provided by the hospital and labeled.
* Each child should then walk through the decontamination shower, preferably in succession with their parent or caregiver, and essentially decontaminate him or herself.
* Non-ambulatory children should be placed on a stretcher by hospital decontamination personnel and undressed (using trauma shears if necessary). All clothes and items that cannot be decontaminated should be placed in appropriate containers or bags as provided by the hospital and labeled.
* Each non-ambulatory child should be escorted through the decontamination shower and assisted with decontamination to ensure the entire patient is properly and thoroughly decontaminated.
* Once through the shower, each child should be given a towel and sheets to dry themselves, and a hospital gown. The child should then immediately be given a unique identification number on a wristband and triaged to an appropriate area for medical evaluation.

Children and their parents or caregivers should not be separated unless critical medical issues take priority.

**2.5.3 Evacuation**

Both Adventist Health Sonora and Mark Twain Medical Center utilize the Disaster Management System Evac 1, 2, 3 system, which includes three components: room evacuation, transportation/staging, and destination. The system uses the internal hospital generated patient labels rather than separate bar-coded tags. Both hospitals have evacuation plans and conduct evacuation trainings and exercises.

**2.5.4 Special Pathogens**

Children exposed or potentially exposed to a highly infectious disease will be cared for according to hospital infection prevention/infectious disease protocols, in addition to the county health departments’ plans.

**2.5.5 Security**

Security will play an integral role in any event requiring the activation of a family reunification plan. Many of these events could involve increased security risks, such as in the case of an active shooter scenario or terrorist activities. In addition, as families attempt to find their loved ones, crowds will form requiring an increased need for security personnel. As such, it is important to engage the institution’s security leadership early in the planning process. At a minimum, the hospital family reunification plan should include the creation of a security leader within its command structure. Hospital security personnel can also assist with coordination of interface between the institution and outside law enforcement. Ideally, an individual with preexisting relationships with law enforcement may fill this position.

Both Adventist Health Sonora and Mark Twain Medical Center have security staff on site, although the number of personnel is limited. If additional security is needed beyond what the facility can provide, local law enforcement will be contacted.

**2.5.6 Media**

Unusual events including pediatric surge events, depending on the size and impact of the surge, will likely garner media attention. Media considerations include where media will be permitted at the scene, at the hospital or other treatment sites, at the Family Assistance Center, etc.; what information is allowed to be released and what must remain confidential; activation of a Joint Information Center (JIC); and who will act as the main Public Information Officer (PIO) since a number of agencies will be involved in the response.

**2.6 Operations – Medical Care**

**2.6.1 Triage**

Disaster triage is a method of quickly identifying victims who have life-threatening injuries and who also have the best chance of survival. Identification of such victims serves to direct other rescuers and health care providers to these patients first when they arrive on the scene. The use of disaster triage involves a change of thinking from everyday care to:

* High intensity care should go to the sickest patient doing the greatest good for greatest number.
* Identify victims with best chance of survival for immediate intervention focusing care on those with serious and critical injuries but who are salvageable.
* Identify victims at extremes of care by sorting those who are lightly injured and those who are so severely injured that they will not survive.
* Immediate treatment to only those victims that procedure or intervention may make difference in survival.
* Altered standards of care based on resource availability.

Disaster triage must be dynamic and fluid in its execution. Primary triage is done at the scene by first responders; the triage category is assigned rapidly and is based on physiologic parameters and survivability. Secondary triage occurs typically at the facility where the patient is transported. The initial triage assignments may change and evolve as the patient’s condition changes so reassessment is crucial. It is essential that medical personnel prioritize transport and treatment based on level of injury and available resources.[[3]](#footnote-3)

**2.6.2 Treatment**

Transfers will be prioritized according to patient acuity. Pediatric specialty consultation may be obtained by the hospitals if they are temporarily caring for pediatric patients to ensure the best care possible; potential resources include telemedicine or bringing in pediatricians from local clinics in the same health system as the hospital.

**2.7 Transportation**

All pediatric patients requiring inpatient hospitalization will be transmitted out of Calaveras and Tuolumne counties, since neither Mark Twain Medical Center nor Adventist Health Sonora have pediatric units. Pediatric patients who can be treated and released from the Emergency Department or from the scene of the incident, if applicable, will treated and released once they are reunited with their parent(s) or guardian(s).

If transporting children in regular vehicles (e.g. not ambulance or helicopter), appropriate child safety car seats must be used.

**2.8 Tracking**

Hospitals have historically served as safe havens for displaced persons during a disaster. Abandoned children are often brought first to a hospital emergency department for evaluation. During a disaster, hospitals may find themselves host to displaced and unaccompanied children. Displaced children, if unaccompanied, are at increased risk for maltreatment, neglect, exploitation, and subsequent psychological trauma. Hospitals and medical clinics will therefore need to be especially alert to the safety and mental health issues of these children. Hospitals will follow their existing tracking and family reunification plans to ensure the safety of children in their facilities.

**2.9 Reunification**

It is essential that children are definitively identified and matched to their legal custodial parent/guardian before release from the hospital. Accurate identification of children before releasing them from the hospital is key to preventing harm. Mistaken identify may lead to:

* Release of a child to the wrong family
* Release of a child to an unauthorized noncustodial parent
* Delay of reunification with the child’s actual family (this affects both the child and the family)
* Failure to identify significant medical and other conditions important to the care of the child

Most children will be able to self-identify verbally, as well as identify their parents.

For those children who cannot be definitively identified, it is recommended that hospitals develop and follow procedures to safely maintain for all unidentified children until they can later be definitively reunited with their families. This includes planning for a pediatric safe area (PSA). Children may not be able to self-identify if they are nonverbal because of developmental age, illness, or ability. In addition, it is possible that some children’s usual guardians may have experienced an extreme loss of resources and may be unable to safely care for the child at the time of release from the hospital.

For children unable to be reunited with a parent or legal guardian, the county child protective services should be notified to take emergency custody

* Calaveras County Child Welfare Services: 209-754-6452
* Tuolumne County Child Welfare Services: 209-533-5717 (after hours: 209-533-4357)

Protective services will work with law enforcement personnel to continue the search for legal custodians and will work with hospital personnel to arrange temporary placement with a child’s relatives or a foster family. Healthcare facilities should take care to familiarize themselves with state laws regarding unaccompanied minors in advance of a disaster and adjust planning efforts accordingly.

**2.9.1 The Hospital Family Reunification Center (HFRC)**

It is recommended that all hospitals have a plan in place to manage a surge of concerned family members, guardians, and friends that may present following a disaster, especially if large numbers of unaccompanied pediatric patients could be involved in the event. This is recommended because the volume of family members presenting to the hospital looking for their loved ones will typically overwhelm hospital lobbies and other care areas and could adversely affect clinic operations. This place where families and others may gather is often called a Hospital Family Reunification Center (HFRC). The HFRC is meant to:

* Provide a private and secure place for families to gather, receive, and provide information regarding children and other loved ones who may have been involved in the incident
* Provide a secure area for these families away from the media and curiosity seekers.
* Facilitate efficient information sharing among hospitals and other response partners to support family reunification.
* Identify and support the psychosocial, spiritual, informational, medical, and logistical needs of family members to the best of the hospital’s ability.
* Coordinate death notifications, when necessary.

Hospitals should consider locations in their facility that are best suited to effectively and respectfully establish a family reunification center. Some considerations to keep in mind are:

* Locate the HFRC away from the hospital Emergency Department and media staging sites as well as away from the designated pediatric safe area (see security section below).
* Ensure there is sufficient space to accommodate many individuals.
  + Adequate space facilitates communication between designated hospital personnel and family members.
* Provide nearby access to smaller rooms that may be used for confidential discussions, notifications, and provision of other support.
  + Distraught family members may need additional space; alcoves or additional rooms may help both psychologically and with security.
* Ensure the space has an area for food and beverage.
* Ensure restrooms are easily accessible.
* Ensure the space is accessible to patients and family members with considerations for access and functional needs.
* Access to the HFRC can be controlled and security can be assured within the site.

**2.9.2 The Family Reunification Site**

Once identification and verification of a child and family is complete, there should be a separate area to facilitate the actual reunification of the family and child. The physical place where pediatric patients are reunited with their legal caregivers should be located away from the HFRC as well as the PSA. This is to permit the reunification to occur in a safe, well-controlled area located well away from the noise and distractions of the other areas. The family reunification site should allow for secure and simple departure from the hospital. Hospitals should also plan for reunification of patients who have been admitted to the hospital and for escorting of parents or guardians to other areas of the hospital.

Separation of the Family Reunification Site from the HFRC is also important to prevent creating additional trauma for families still waiting in the HFRC who are not yet reunited with their children but who would otherwise be watching reunifications happening in front of them.

Families arriving at the hospital will be under a tremendous amount of stress and may have limited ability to process instructions or other information while they are looking for their children. Therefore, staff members in the HFRC must have experience in helping people under stressful conditions. Hospital staffing may include, but are not limited to, the following departments:

* Security
* Social Work
* Nursing
* Chaplaincy
* Psychiatry or Psychology
* Pediatrics
* Family Medicine

The hospitals may also request support from non-hospital agencies such as Victim Witness or Behavioral Health.

Adventist Health Sonora has a draft Family Reunification Plan which includes a family reunification center procedure (includes a news media center checklist), set-up consideration checklist, contact list, phone operator call log, and a minor tracking form.

The Tuolumne County Sheriff’s Office Mass Fatality Plan includes a Family Assistance Center section, which outlines roles and responsibilities, Family Assistance Center services, and activation of the center.

Mark Twain Medical Center does not have its own Family Reunification Plan; rather, they utilize the Calaveras County Patient Tracking and Reunification Plan. This plan includes patient tracking information, Family Reunification Task Force activation procedure, hospital switchboard procedure, a patient transportation summary worksheet, a patient destination worksheet, and an MCI patient directory.

**2.10 Deactivation and Recovery**

Deactivation in the hospital(s) will occur once the Hospital Command Center determines that the pediatric surge event is no longer impacting the hospital enough to warrant activation. EMS and other involved partners may deactivate at different times. It is expected that an after action meeting(s) will occur after a pediatric surge event. This plan will be adjusted, as needed, after pediatric surge events, and trainings and exercises will be planned to address identified gaps.

**3. Appendices**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.1 Trainings and Exercises**

Adventist Health Sonora and Mark Twain Medical Center regularly train and exercise on topics relevant to this plan, such as patient tracking, family reunification, and HazMat. The hospitals also participate in exercises in conjunction with the Tuolumne-Calaveras Health Care and Safety Coalition, which includes EMS, Public Health, the Sheriff’s Office, and other local partner agencies mentioned in this plan.

Once this plan was drafted and Health Care and Safety Coalition partners were given an opportunity to review it and provide feedback, the planning committee and other key partners participated in a Pediatric Surge Tabletop Exercise. The exercise was conducted at Adventist Health Sonora on April 16, 2020.

**3.2 Legal Concerns**

**3.3 Pediatric Referral Resources**

**3.4 Additional Resources/References**

1. “American Community Survey 5-Year Estimates,” U.S. Census Bureau, (2018). [↑](#footnote-ref-1)
2. “Children in Disasters: NYC DOHMH Hospital Guidelines for Pediatric Preparedness,” 3rd Edition, (2008). [↑](#footnote-ref-2)
3. “Planning for Children in Disasters,” State of Michigan, (2005). [↑](#footnote-ref-3)