ALAMEDA COUNTY

DISASTER PREPAREDNESS HEALTH COALITION

ALAMEDA COUNTY DISASTER PREPAREDNESS HEALTH COALITION (DPHC)

- HCC RESPONSE PLAN -

PEDIATRIC MEDICAL SURGE ANNEX

NOT FOR DISTRIBUTION - WORKING DRAFT – **OCTOBER 19, ,2021**

July 2021

APPROVAL AND IMPLEMENTATION

The Pediatric Surge Annex to the DPHC Response Plan has been approved and implemented in concurrence with County agencies and departments.

The following members concur with the content of the Annex. As needed, revisions will be submitted to the Alameda County EMSC Coordinator. Signed:

_____	_____
Lauri McFadden, EMS Director	Date Signed
_____	_____
Will McClurg, Deputy EMS Director	Date Signed
_____	_____
Colleen Chawla, Director, Health Care Services Agency	Date Signed
_____	_____
Nick Moss, MD, Health Officer	Date Signed

DOCUMENT UPDATE RECORD

Version	Date	Description of Change, Reviewers	Published By

DISCLAIMERS

This plan is intended to support, not replace, any existing facility or agency policy or plan by providing uniform response actions in the case of an emergency that involves (or could involve) significant numbers of children.

CONTENTS

CONTENTS

ANNEX APPROVAL AND REVIEW

Given the COVID-19 Pandemic, this preliminary draft is pending comprehensive review & approval.

This annex was developed in collaboration with the Alameda County EMSC & Pediatric Surge Advisory Group, Disaster Preparedness Health care Coalition (DPHC), subject matter experts (SMEs), and other collective health care partners. Health care Coalition pediatric SMEs with the HPP LEMSA Coordinator will approve, update annually, and maintain the Pediatric Surge Annex. The review will include identifying gaps in the preparedness plan and working with pediatric SMEs to define strategies to address the gaps. All DPHC members have the opportunity to provide input and receive a copy of the revised response plan.

PLAN DEVELOPMENT TEAM &/OR SUBJECT MATTER EXPERT ADVISORS * RESPONSE SMEs**

1. Introduction

'Children are not little adults' and separate consideration of their needs during an emergency is critical. The need for a strong collaborative approach to integrate newborns, infants and children into disaster planning is vital to effective response. Neonatal and pediatric all-hazard preparedness relies on a strong network of committed emergency management, public health agencies, emergency medical services, hospitals, and community partners.

Disaster events with unprecedented challenges across the country and around the world over the last decade (including the COVID-19 pandemic) have forever changed the entire medical and health response landscape. Whether natural or human-caused, emergencies (often occurring simultaneously) are an expected reality affecting our children in all communities, hospitals, first responders, and those who live and work in Alameda County. Hospitals and health care coalitions are faced with significant challenges in pediatric response to natural or human-caused events or disasters. Critical surge planning and response preparedness must accommodate both large volumes of patients and the needs of specific vulnerable patient groups including pediatric patients**.**

With pre-identified collective partnerships, the pediatric surge annex will contribute to pediatric readiness for a potential surge of pediatric patients and the consequential impact on the delivery system. This plan is anchored in best practices from across the country and guided by evidence-based models. The framework and guidance tools will support health care facilities, EMS transport providers, and county department plans for the potential pediatric surge. This document addresses essential categories including health care delivery, triage, transport, medical care, and logistics that could be impacted when resources are limited or insufficient to meet the medical needs of patients. An overview of surge capacity and crisis care operational considerations are provided for health care facilities with an emphasis on the Alameda County hospitals. Information supports regional and operational area medical coordination for response.

This annex is designed to provide a guide for the Alameda County Health Care Coalition partners with the core content below:

- The CONOPs sections are aimed at specific target coalition partner roles, integrated within the existing infrastructure, and intended for use at all levels of care and throughout the coalition with focus on the hospitals and the Operational Area Emergency Operations Center (EOC).
- The Annex delineates customized EOC Medical/Health Branch response roles and responsibilities with special focus on activation, communication pathways, patient movement decisions, and medical care of children impacted during and in the aftermath of an emergency incident or event.

This document is consistent with the "healthcare surge" definition In the California – "*Standards and Guidelines for Healthcare Surge During Emergencies*," developed by the California Department of Public Health as follows:.

> *A healthcare surge is proclaimed in a local jurisdiction when an authorized local official, such as a local health officer or other appropriate designee, using professional judgment determines, subsequent to a significant emergency or circumstances that the healthcare delivery system has been impacted, resulting in an excess demand over capacity in hospitals, long-term care facilities, community care clinics, public health departments, other primary and secondary providers, resources and/or emergency medical services. The local health official uses the situation assessment information*

provided from the healthcare delivery system partners to determine overall local jurisdiction/Operational Area medical and health status.

- Essential **surge foundation elements** and assumptions include:
  - ❖ Ensure integration within existing EOC and ICS infrastructure
  - ❖ Enable safe and expert pediatric transfer decision making
  - ❖ Implement standardized care guidelines as needed
  - ❖ Ensure activation of redundant and interoperable communications processes
  - ❖ Support the tracking of pediatric patients throughout the incident
  - ❖ Identify hospital bed expansion and decompression strategies to manage surge and limited/scarce resources
  - ❖ Ensure the coordination of transferring acutely ill/injured pediatric patients to pediatric tertiary care centers/specialty care centers
  - ❖ Support decompression from pediatric tertiary care centers/specialty care centers to make additional critical care beds available for acutely ill/injured pediatric patients
  - ❖ Access to SMEs across and within state lines

SECTION 1: PREPAREDNESS PLAN

1.1 Purpose

This annex applies to a catastrophic pandemic event, mass casualty incident or evacuation with a disproportionately large number of pediatric patients. The **focus** is maximizing pediatric survival, maximizing resources, and minimizing morbidity. The **purpose** of this plan is to establish a process in which the strengths of the medical resources can be used to mitigate the impacts of a large number of pediatric patients within the Alameda County Operational Area.

This plan is intended to support, not replace, any existing facility or agency policy or plan by providing uniform response actions in the case of an emergency that involves (or could involve) significant numbers of ill or injured children. This plan also supports the Alameda County Emergency Operations Plan and the MHOAC Manual.

The purpose of the plan is to serve as a supporting annex to the Health Care Coalition (HCC) Response Plan (also referred to as the DPHC Response Plan) and the Alameda County MHOAC Manual by addressing the specific needs of children and supporting appropriate pediatric medical care and transport during a disaster.

Goals - ***"Right Patient, Right EMS Resource, Right Destination"***

- **To increase and sustain pediatric capacity and capability to meet the demands of a surge of pediatric patients in an Alameda County catastrophic event**
- **To describe a seamless process for primary and secondary inter-facility transfer of pediatric patients**
- **To provide the Alameda County operational area Medical/Health Branch and coalition partners with pediatric response strategies using a CONOPs (for communications, triage, medical care, treatment, patient transport, patient tracking, bed expansion, evacuation, acute care and contingency or crisis standards of care for pediatric patients during a disaster)**
- **To map resource assets (personnel, supplies, space, SMEs) for "resource matching" during response**
- **To ensure pediatric coalition planning, training, and exercises**
- **To provide best practice resources and access to SMEs**

Patient Movement – Scope and Assumptions

- This plan framework establishes the response system based on capacity and capability.
- **Patient age and acuity need to be considered when determining the location where children will be treated and transported.**
- Given the variability in pediatric patient census during normal operations and crisis events, all hospitals are expected to plan for an event resulting in a surge of pediatric patients.
- **This annex is based on caring for more critically ill children in specialty pediatric facilities that are accustomed to caring for children with provisions for critical care expansion through decompression of less critically ill children and adults to other facilities.**

Patient Movement – Scope and Assumptions

- **A priority focus of the plan is on movement of large numbers of patients:**
  - **Field transport to initial hospital**
  - **Initial hospital to destination hospital**
  - **Evacuating facility to destination facility**
- In day-to-day operations, perinatal and pediatric patients are triaged, treated and then transported to a facility which can provide the level of care needed for the best outcome. However, with a surge of patients during a disaster, there may be times when patients need to be cared for at a facility that normally would transfer them to a higher level of care.

EMS-C Overview and Integration

This annex ensures coordination between the Hospital Preparedness Program (HPP) and the EMS for Children (EMS-C) program. This annex aligns with the California EMS for Children Regulations in effect as of July 1, 2019.

- The **mission** of the Alameda County EMS for Children (EMS-C) program is to reduce pediatric morbidity and mortality from injury or illness by development, implementation, and integration of EMSC activities into the spectrum of EMS systems. Alameda County EMSC is a specialty care program of the EMS Agency.
- The **vision** is to create a seamless system of care for children throughout the county from injury prevention, emergency preparedness, prehospital care, and medical care through reintegration into the community.
- The **overall goal** of theEMS-C program is to ensure that acutely ill and injured children have access to high quality, coordinated, and comprehensive emergency and critical care services appropriate for children's special needs.

The **EMS-C Model** provides a continuum of care, beginning with the detection of illness or injury to emergency department care and rehabilitation. **Refer to Section 3.7 and the Alameda County EMS website for additional information: http://ems.acgov.org/ClinicalProcedures/EMS-C.page?**

1.2 SCOPE

This plan is designed to provide a guide for the Alameda County Operational Area Health Care Coalition to:

- **Enable safe pediatric transfer decision making**
- **Implement standardized care guidelines as needed**
- **Ensure associated communications processes are in place**
- **Support the tracking of pediatric patients throughout the incident**
- **Identify strategies to manage surge and scarce resources.**
- **Assist with the coordination of transferring acutely ill/injured pediatric patients to pediatric tertiary care centers/specialty care centers**
- **Assist with the decompression from pediatric tertiary care centers/specialty care centers to make additional critical care beds available for acutely ill/injured pediatric patients**

Timeframe

- The timeframe covered by the plan includes the Immediate, Intermediate, Extended Operational Periods which may last for days, weeks or months depending on the type of event (e.g. mass casualty or pandemic), until beginning Demobilization System Recovery.

Pediatric Patient and Age Group Definitions

- Many methods exist for identifying the pediatric population using age criteria to plan for the care of large numbers of children. An age criterion is due to many considerations regarding pediatric transport, treatment, supplies, and size of patient. Pediatric patients can be defined as ages 21 and under (American Academy of Pediatrics). or under 14 years old in the California Pediatric, Neonatal, and OB Surge Annex to the Patient Movement Plan (draft 2019).
- Per the Alameda County EMS Field Manual 2020, the defined age of a pediatric patient is 14 years old or less, and unless specified otherwise, pediatric protocols should be used to treat these patients. (Note: An infant is considered to be < 1 year old. A child is considered to be ≥ 1 year old).

AGE GROUPS

- For this annex, the following pediatric age groups are utilized to define the pediatric population and determine special age group related considerations:

  - **Infants/toddlers (0-24 months)**
  - **Toddlers/preschoolers (2 -5 years)**
  - **School aged children (6 up to age 14 years)**
  - **Adolescent children over 14**
  - **Children with underlying complex medical conditions. (Note: Some children with special needs who are over 14 and experience chronic conditions such as cystic fibrosis, cerebral palsy, and others will likely require specialized attention during a disaster.**

- The plan includes the mother-baby couplet (obstetrics), newborns (NICU and well newborns) and children from birth through 14 years of age.

Overview/Background of Health Care Coalition & Situation

Coalition and Operational Area Partners

- *The Annex is directed to multi-level partners: Alameda County Operational Area (OA) government departments and agencies; municipal governments (local jurisdictions); health care systems and facilities (HCFs) including tertiary care/specialty hospitals and non-hospital HCFs; prehospital 911 and inter-facility (IFT) transportation providers, coordinating agencies from outside the county; nongovernmental organizations (NGOs) and community based organizations (CBOs) that respond to disaster incidents and events. The health care system includes provider networks, of hospital, ambulatory care, in-home services, long-term care, behavioral health, and ancillary care services. Provider networks include Alameda Health System, Kaiser Permanente, Sutter Health, Stanford and others*.

Disaster Preparedness Health Coalition and Health Care System

- The Alameda County Disaster Preparedness Health Coalition (DPHC) is integral to the planning and response for children. DPHC comprises core health care partners including EMS, Public Health, Emergency Management, Hospitals, Long Term Care Facilities and Clinics with other pediatric health care partners and county agencies and organizations making up the rest of its membership.

Hospital Pediatric Readiness – PECCs & SMEs.

- Alameda County has a contract with UCSF Benioff Children's Hospital to conduct pediatric readiness hospital site visits with pediatric simulation training and customized evaluations. Site visits occur at a minimum every other year.
- Through the Pediatric Readiness Project, Pediatric Emergency Care Coordinators (PECCs) have been identified within hospitals including emergency departments, pediatric experts and coordinators, physicians, and nurses. Other pediatric specialists and SMEs have been engaged including primary care representatives, pediatric behavioral health, inpatient maternity, critical care (PICU), and post-natal services have been identified. **- Refer to Section 3.6 and 3.7 for additional information. The PECCs participate in annual state medical / health exercises and real events.**

Mutual Aid Region II

Operational Area (OA) Medical Health Mutual Aid Structure

- Alameda County lies within the Medical Health Mutual Aid (MHMA) Region II - which includes the counties of San Francisco, Santa Clara, San Mateo, Santa Cruz, Monterey, San Benito, Contra Costa, Solano, Lake, Napa, Humboldt, Del Norte, and Mendocino. This regional approach ensures the RDMHS and MHOAC program, multi-agency coordination, establishing priorities during a response, and allocating resources.
- **The Region II – Regional Disaster Medical Health Specialist (RDMHS) and OA Medical Health Operational Area Coordinator (MHOAC) coordinate to ensure resources are matched with need. The coalition is central to leveraging situational awareness and identifying system-wide needs.**

NGO and CBO Referral Agencies

- NGOs and private-sector businesses that provide pediatric resources and services in response to a disaster are encouraged to provide liaisons to the EOC. The Alameda County EOC has designated space to facilitate he support of select liaisons. **– Refer to Section 3.10**

Western Regional Alliance for Pediatric Emergency Management (WRAP-EM)

- UCSF Benioff Children's Hospital was awarded the National ASPR Center of Excellence grant which created a pediatric alliance amongst specialty children's hospitals across five states and pediatric expert connections across the country. The goal is to develop pediatric disaster planning and response capabilities across states and to leverage unprecedented partnerships. The Alameda County LEMSA Coordinator actively participates on the WRAP-EM project, facilitates the surge focus group, and leverages pediatric SMEs in planning

and response including during the COVID-19 pandemic. Several Alameda County DPHC Coalition partners are leading or participating in the WRAP-EM working groups. -**Refer to Section 3.13 for additional information.**

1.3 SITUATION OVERVIEW

- ### 1.3.1 Background / Risk

Children Demographics

- Alameda County is approximately 739 square miles of land and 82 of water, located in the center of the San Francisco Bay Area, with a diverse demographic and socioeconomic population of 1.6 million. The City of Oakland, in the north part of the County, is the largest city with a population of 412,000+. Other large cities include Fremont in the south (210,000+), the City of Hayward in the mid-part of the County (146,000+), and the City of Berkeley in the northern sector of the County (105,000+). Approximately 160,000+ people reside in the cities of Livermore, Dublin and Pleasanton located in the eastern County. Refer to http://www.acgov.org/government/maps.htm **and Section 3.1**

Children in Alameda County

Indicator	Year	Alameda County
Child Population Ages 0-17	2018	351,696

- The **population of Alameda County in 2019 was 1,671,329**. The table below shows the child population of Alameda County by sex and age group. Alameda County residents are almost evenly split by gender—50.9% are female—but males make up the majority in younger age groups and females in older. Most Alameda County residents are between 25 and 64 years.
- In 2020, the child population **ages 0-17 years old was 354,212**. Refer to tables with the specific age groups for children identified below: https://www.kidsdata.org/region/127/alameda-county/summary#44/physical-health

Child Population, by Age Group and Gender

Year(s): 2020

Alameda County	Number		
Age Group	Female	Male	Total
Ages 0-2	27,343	28,199	55,542
Ages 3-5	28,288	29,871	58,159
Ages 6-10	49,420	50,590	100,010
Ages 11-13	29,618	31,365	60,983
Ages 14-17	39,105	40,413	79,518
Total for Ages 0-17	173,774	180,438	354,212

Children with Special Health Care Needs

Year(s): 2016-2018

Locations	Percent
California	14.5%
Alameda County	13.1%

- Over 10% of children in Alameda County live in poverty with the highest concentrations in the urban areas of Berkeley, and Oakland. Poverty will impact a child's access to transportation and communication in a disaster and may, therefore, contribute to separation from parents/guardians during an evacuation.
- Approximately **13%, children in Alameda County have special needs**. Almost 3% of children have major disabilities during this time period. In 2018 0.5% of children ages 5-19 were hospitalized for mental health issues.

Children in Deep Poverty Data Demographics

Alameda County	Percent
African American/Black	31.3%
American Indian/Alaska Native	S
Asian American	6.4%
Hispanic/Latino	19.1%
Native Hawaiian/Pacific Islander	7.8%
White	5.4%
Multiracial	11.0%
All Children	13.0%

Special Education Enrollment, by Disability

Alameda County	Percent
Autism	16.6%
Deaf	N/A
Deaf-Blindness	0.0%
Emotional Disturbance	4.0%
Established Medical Disability	N/A
Hard of Hearing	2.2%
Intellectual Disability	5.5%
Learning Disability	36.6%
Orthopedic Impairment	0.9%
Speech or Language Impairment	20.0%
Traumatic Brain Injury	0.2%
Visual Impairment	0.5%
Multiple Disability	1.0%
Other Health Impairment	12.6%

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Children in Alameda County

Indicator	Year	Alameda County	California	Data Source
Percentage of Children Ages 1-17 Ever Diagnosed with Asthma	2015-2016	19.6%	15.2%	UCLA Center for Health Policy Research, California Health Interview Survey (Mar. 2018).
Percentage of High-Need Students (Unduplicated Pupil Count)	2019	48.7%	62.7%	California Dept. of Education, California Longitudinal Pupil Achievement Data System (CALPADS) Unduplicated Pupil Count (UPC) Source Files (Sept. 2019).
Percentage of Students Receiving Special Education Services	2019	11.8%	12.8%	California Dept. of Education, DataQuest & Special Education Division custom tabulation; National Center for Education Statistics, Digest of Education Statistics (Jun. 2020).
Percentage of Students Meeting or Exceeding Grade-Level Standard in Reading	2019	57%	51%	California Dept. of Education, Test Results for California's Assessments (Jan. 2020).
Percentage of 5th Graders Who Are Overweight or Obese	2018	36.2%	40.5%	California Dept. of Education, Physical Fitness Testing Research Files (Dec. 2018).
Children with Reports of Abuse or Neglect	2018	30.9 (Rate per 1,000)	52.9 (Rate per 1,000)	Webster, D., et al. California Child Welfare Indicators Project Reports, UC Berkeley Center for Social Services Research (Jul. 2019).
Children/Youth Ages 0-20 in Foster Care	2018	3.3 (Rate per 1,000)	5.3 (Rate per 1,000)	Webster, D., et al. California Child Welfare Indicators Project Reports, UC Berkeley Center for Social Services Research (Jul. 2019).
Percentage of 7th Graders Who Were Bullied at School in the Previous Year	2015-2017	34.4%	33.6%	WestEd, California Healthy Kids Survey (CHKS) and Biennial State CHKS, California Dept. of Education (Mar. 2019).
Students Suspended from School	2019	31.9 (Rate per 1,000)	34.7 (Rate per 1,000)	California Dept. of Education, Suspension Data (Dec. 2019).
Percentage of 9th Graders with Feelings of Depression	2015-2017	25.3%	29.6%	WestEd, California Healthy Kids Survey (CHKS) and Biennial State CHKS, California Dept. of Education (Mar. 2019).
Percentage of 9th Graders with High Levels of School Connectedness	2015-2017	49.6%	45.5%	WestEd, California Healthy Kids Survey (CHKS) and Biennial State CHKS, California Dept. of Education (Mar. 2019).

Definitions for LNE, N/A, N/R, or S can be found in the footnote section of the Indicator page.
More data on Alameda County: https://www.kidsdata.org/region/127/alameda-county/summary

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Children in Alameda County

Indicator	Year	Alameda County	California	Data Source
Child Population Ages 0-17	2020	354,212	9,026,052	California Dept. of Finance, Population Estimates and Projections (May 2020); U.S. Census Bureau, Population and Housing Unit Estimates (Jul. 2020).
Percentage of Infants Born Preterm (Based on Obstetric Estimates (OE))	2016	8.4%	8.6%	California Dept. of Public Health, Birth Statistical Master Files; CDC WONDER, Natality Public-Use Data (Feb. 2019).
Percentage of Children Living with Two Parents	2013-2017	70.0%	63.5%	U.S. Census Bureau, American Community Survey (Dec. 2018).
Percentage of Children Living with One or More Foreign-Born Parent	2012-2016	55.7%	49.3%	U.S. Census Bureau, American Community Survey (Jan. 2018).
Percentage of English Learners in Public Schools	2020	19.5%	18.6%	California Dept. of Education, English Learners by Grade and Language (Jul. 2020).
Percentage of Children Living Below the Federal Poverty Threshold	2013-2017	13.0%	20.8%	U.S. Census Bureau, American Community Survey (Dec. 2018).
Percentage of Children Living in Low-Income Working Families	2012-2016	17.5%	25.9%	Population Reference Bureau, analysis of data from the U.S. Census Bureau's American Community Survey microdata files (Feb. 2018).
Percentage of Children Living in Food Insecure Households	2017	15.2%	18.1%	Gundersen, C., et al. Map the Meal Gap 2019: Feeding America (May 2019).
Percentage of Public School Students Who Are Homeless	2016	1.8%	4.4%	California Dept. of Education, Coordinated School Health and Safety Office custom tabulation & California Basic Educational Data System (May 2017).
Percentage of Children Ages 0-18 with Health Insurance Coverage	2013-2017	96.8%	95.3%	U.S. Census Bureau, American Community Survey (Dec. 2018).
Percentage of Children/Youth Ages 0-21 with Medi-Cal or CHIP Coverage	2012-2016	28.7%	38.6%	Population Reference Bureau, analysis of data from the U.S. Census Bureau's American Community Survey microdata files (Feb. 2018).
Percentage of Children in Excellent or Very Good Health	2013-2014	82.1%	74.1%	UCLA Center for Health Policy Research, California Health Interview Survey (Sep. 2016).
Percentage of Kindergarteners with All Required Immunizations	2019	96.6%	94.8%	California Dept. of Public Health, Immunization Branch, Kindergarten Data and Reports (Jun. 2019).

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Children in Alameda County Office of Education

Indicator	Year	Alameda County Office of Education	Alameda County	California	Data Source
Public School Enrollment	2020	4,002	227,331	6,163,001	California Dept. of Education, DataQuest; National Center for Education Statistics, Digest of Education Statistics (May 2020).
Number of Students Truant from School	2016	1,533	68,975	2,182,978	California Dept. of Education, Truancy Data (Dec. 2017).
Number of Students Suspended from School	2019	190	7,534	219,446	California Dept. of Education, Suspension Data (Dec. 2019).
Number of Students Expelled from School	2019	0	128	5,191	California Dept. of Education, Expulsion Data (Jan. 2020).
Percentage of Kindergarteners with All Required Immunizations	2019	S	96.6%	94.8%	California Dept. of Public Health, Immunization Branch, Kindergarten Data and Reports (Jun. 2019).
Percentage of Students Who Are Homeless	2016	16.8%	1.8%	4.4%	California Dept. of Education, Coordinated School Health and Safety Office custom tabulation & California Basic Educational Data System (May 2017).
Number of Foster Youth in Public Schools	2019	30	454	33,514	California Dept. of Education, California Longitudinal Pupil Achievement Data System (CALPADS) Unduplicated Pupil Count (UPC) Source Files (Sept. 2019).
Percentage of Students Receiving Special Education Services	2019	N/A	11.8%	12.8%	California Dept. of Education, DataQuest & Special Education Division custom tabulation; National Center for Education Statistics, Digest of Education Statistics (Jun. 2020).
Percentage of High-Needs Students (Unduplicated Pupil Count)	2019	65.6%	48.7%	62.7%	California Dept. of Education, California Longitudinal Pupil Achievement Data System (CALPADS) Unduplicated Pupil Count (UPC) Source Files (Sept. 2019).
Percentage of Students Eligible for Free or Reduced Price School Meals	2020	61.2%	41.7%	59.2%	California Dept. of Education, Student Poverty FRPM Data; National Center for Education Statistics, Digest of Education Statistics (Jul. 2020).

Local Risks for Pediatric-Specific Mass Casualty Events (e.g., schools, transportation accidents)

- During complex catastrophic pandemics, mass casualty incidents due to terrorism or natural disasters (e.g., earthquakes), a heightened pediatric surge risk exists. Co-occurring events may occur.
- Civil unrest, and extreme heat emergencies will especially impact the EMS response and medical care of children and their families.
- Critical care bed capacity for children is limited system-wide.
- Pediatric capability may be compromised with competing needs for resources.
- For specific hazards for Alameda County see the Alameda County Emergency Operations Plan Section 2.4.
- **Refer to Section 3.1 for additional hazard vulnerability information.**

- Children have specialized medical issues due to their unique developmental and physiologic characteristics different from adults.
- Children are dependent on adults for care, shelter, transportation, and protection from predators.
- Children are more susceptible to chemical, biological, radiological, and nuclear threats and require different medications, dosages, and delivery systems than adults.
- A strained over-whelmed system will compromise the medical and psychological needs of children.

1.3.2 Health Care System and Pediatric Capability and Capacity

Hospital Systems

- Within Alameda County, currently thirteen hospitals exist as emergency receiving centers for ambulance transport: 12 adult and 1 pediatric. Thirteen are LEMSA designated Pediatric Receiving Centers (PedRCs).
- The acute care receiving facilities located in Alameda County provide a wide range of services to care for the health needs of residents/visitors and feature specialized care programs including trauma, stroke, pediatric, psychiatric and cardiac services. There is one Level I Adult Trauma Center and one Level II Adult Trauma Center. UCSF Benioff Children's Hospital in the main pediatric hospital with Level I Trauma designation, while other hospitals have varying pediatric capacity and capabilities, including adolescent beds, intensive care units for children, specialized equipment and resources for neonatal and pediatric patients, and ambulance transport providers with capability to transport children including LifeFlight operations.
- In addition to UCSF Benioff Children's Hospital, Alameda County has neonatal and pediatric beds at hospitals including: Kaiser Permanente Oakland, Stanford ValleyCare Health System, and Washington Hospital Healthcare System.
- **All emergency rooms are expected to have the capability to take care of children**.
- **Hospital status and bed availability information can be found through the ReddiNet system, which can be accessed through EMS and the EOC Medical/Health Branch if activated.**[1]

[1]ReddiNet is a password protected system. For more information regarding access to this system, contact EMS or the OA EOC Medical and Health Branch.

Regional Facility Designations

Regional Adult Centers	Trauma Ctr Designation	PICU Level of Care	NICU Designation
Alameda County Health System - Medical Center (Highland)- Oakland	Level 1		
John Muir Medical Center – Walnut Creek	Level 2	Yes	Level III
Kaiser Permanente – Oakland		Yes	
Kaiser Permanente Medical Center – Vacaville	Level 2		
Regional Medical Center San Jose	Level 2		
Santa Clara Valley Medical Center – San Jose	Level 1	Yes	Regional Level IV
Sutter Alta Bates – Berkeley			Regional CCS
Sutter Eden Medical Center – Castro Valley	Level 2		
Stanford Health Center Lucile Packard Children's Hospital of Stanford – Stanford	Level 1 Pediatric & Adult		Regional Level IV
UC Davis Medical Center – Sacrament	Level 1 Pediatric & Adult	Yes	Regional Level IV
UCSF Benioff Children's Hospital – Oakland	Level 1 Pediatric	Yes	Regional Level IV
Zuckerberg San Francisco General Hospital	Level 1		Level III

Pediatric Capability and Asset Mapping

- Pediatric resources and capabilities are represented in the DPHC coalition. Specifically, there are children's/pediatric hospitals, hospitals with routine pediatric services [Emergency Department], inpatient pediatrics, and/or neonatal or pediatric intensive care units):

Hospital Bed Capacity

- The table below represents the daily total of licensed beds by type in Alameda County facilities with 24-hour emergency care services These numbers represent the normal licensed capacity for inpatient and emergency care services.
- Once the **CA Pediatric Surge Annex to the Patient Movement Plan draft 2019** is approved, Alameda County will implement the tiered definitions noted in the table above and described below as follows:

SECTION 1: PREPAREDNESS PLAN

Pediatric Capability and Capacity for Patient Movement – *REFORMAT TO SEE #s*

NAME	Category (H, M, L)	Trauma	CCS	CCS Level	Total Beds	PICU	Licensed Ped Beds	NICU Reg	NICU Comm	NICU Int	Perinatal *	ICU / CCU	CPeTS-Perinatal Transport
COMPREHENSIVE PedRC (HIGH TIER)													
Kaiser Oakland **	**H**		Y	Regional	**315**	**12**	**37**	**24**			42	**32**	Kaiser
UCSF Benioff Children's Hospital Oakland **	**H**	**P1***	Y	Regional	**190**	**23**	**104**	**51**					North
ADVANCED PedRC (MEDIUM TIER)													
Stanford Valley Care	**M**				**167**		**4**		**10**		15	**22**	
Washington Hospital	**M**		Y	Intermediate	**341**		**17**			**14**	22	**29**	
GENERAL PedRC (LOW TIER)													
Alameda Hospital	**L**				**135**								
Alta Bates Summit MC	**L**		Y		**416**				**55**		116	**30**	
Alta Bates Summit MC-Alta Bates Campus **	**L**			Community	**347**				**54**		75		North
Eden MC	**L**	**A2**			**130**								
Highland Hospital	**L**	**A1**	Y	Non CSS ICNN	**249**			**8**			17		
Kaiser – Fremont	**L**				**106**								Kaiser
Kaiser San Leandro	**L**		Y	Community	**216**				**20**		38	**30**	Kaiser
San Leandro Hospital	**L**				**93**								
St. Rose Hospital	**L**		Y	Basic	**217**						17		
13	13	**1 – P; 2 – A**			###								

- **PEDRCs**=Pediatric Receiving Centers
- **Category: H** = high, **M** = medium, L = low
- **Trauma:** A = ADULT TRAUMA - - P = PEDIATRIC TRAUMA -- - MC = Medical Center
- **PICU**: pediatric ICU
- **NICU Reg**: Regional Neonatal ICU (Level IV)
- **NICU Comm**: Community Neonatal ICU (Level III)
- **NICU Int**: Intermediate Neonatal ICU (Level II)

TRANSPORT COORDINATION AND TEAMS

- **Critical Care Deployable Teams** = Alta Bates Berkeley; UCSF Benioff children's; and Kaiser Oakland
- **Regional Transport Coordination** = UCSF Benioff Children's Hospital Oakland

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HIGH TIER - Pediatric Tertiary Center

- Definition – a referral/receiving hospital providing comprehensive specialized pediatric medical and surgical care to the most critically ill or injured children; Criteria - Must have regional NICU, PICU, and licensed pediatric beds; may have designation as Trauma Center, ideally pediatric

MEDIUM TIER – Pediatric Community Hospital

- Definition – GACH community-based hospital with licensed pediatric beds, able to provide some pediatric services – relationship to a HIGH Tier facility, may be asked to keep/receive children who would normally be transferred.- - Criteria - Must have NICU (Regional, Community, or Intermediate); licensed pediatric beds; may have PICU; Designation as Trauma Center (Pediatric or Adult)

LOW TIER – General Community Hospital

- Definition –Usually small community hospitals (includes Critical Access Hospitals), with general medical/surgical beds, able to provide some basic inpatient pediatric services– relationship to a HIGH Tier facility, may be asked to keep/receive children who would normally be transferred. Criteria - Must have general acute care beds, 911 receiving center; may have adult ICU, newborn nursery

Definitions -

- NICU Levels from AAP -

Level I (Well Newborn Nursery)

- Level I units are typically referred to as the well baby nursery. These facilities have the capability to provide neonatal resuscitation at every delivery; evaluate and provide postnatal care to healthy newborn infants; stabilize and provide care for infants born at 35 to 37 weeks gestation who remain physiologically stable; and stabilize newborn infants who are ill and those born less than 35 weeks' gestation until transfer to a facility that can provide the appropriate level of neonatal care. Required provider types for well newborn nurseries include pediatricians, family physicians, nurse practitioners and other advanced practice registered nurses.

Level II (Special Care Nursery)

- Level II units are also known as special care nurseries and have all of the capabilities of a Level I nursery. These facilities are required to have pediatric hospitalists, neonatologists and neonatal nurse practitioners, in addition to Level I health care providers.
- Level II units are able to:
  - Provide care for infants born at 32 weeks gestation or older and weighing more than or equal to 1,500 grams who have physiologic immaturity or who are moderately ill with problems that are expected to resolve rapidly and are not anticipated to need subspecialty services on an urgent basis
  - Provide care for infants who are feeding and growing stronger or recovering after intensive care
  - Provide mechanical ventilation for a brief duration or continuous positive airway pressure
  - Stabilize infants born before 32 weeks gestation and weighing less than 1,500 grams until transfer to a neonatal intensive care facility

Level III (Neonatal Intensive Care Unit)

- Level III units are required to have the same care providers required for Level II facilities (pediatric hospitalists, neonatologists and neonatal nurse practitioners) and Level I facilities (pediatricians, family physicians, nurse practitioners and other advanced practice registered nurses).
- In addition, Level III units must provide, either on site or at a closely related institution by prearranged consultative agreement, the following providers: pediatric surgeons, pediatric medical subspecialists, pediatric anesthesiologists and pediatric ophthalmologists.
- Level III neonatal intensive-care units are able to:
  - Provide sustained life support
  - Provide comprehensive care for infants born at all gestational ages and birth weights with critical illness
  - Offer prompt access to a full range of pediatric medical subspecialists, pediatric surgical specialists, pediatric anesthesiologists and pediatric ophthalmologists
  - Provide a full range of respiratory support that may include conventional and/or high-frequency ventilation and inhaled nitric oxide -
  - Perform advanced imaging, with interpretation on an urgent basis, including computed tomography, MRI and echocardiography

Level IV (Regional NICU)

- The highest level of neonatal care provided occurs at regional NICUs, or Level IV neonatal intensive care units. These units are required to have pediatric surgical subspecialists on staff in addition to the care providers required for Level III units.
- Regional NICUs have all of the capabilities of Level I, II and III units. In addition to providing the highest level of care,
- Level IV NICUs:
- Are located within an institution that has the capability to provide surgical repair of complex congenital or acquired conditions.
- Maintain a full range of pediatric medical subspecialists, pediatric surgical subspecialists and pediatric anesthesiologists at the site
- Facilitate transport and provide outreach education
- Provide ECMO (Extracorporeal Membrane Oxygenation)

PICU Levels from AAP

- The 2019 policy establishes three levels of PICUs: community based PICU, tertiary PICU and quaternary or specialized PICU. Refer to: https://www.aappublications.org/news/2019/09/05/picu090519 and https://pediatrics.aappublications.org/content/144/4/e20192433

Community based PICUs

- Play an important role in health care systems that provide care to infants and children. In general, these centers are mostly located in hospitals that offer medical-surgical care and a range of services targeted at the most fundamental level of pediatric intensive care services.

Tertiary PICUs

- Have enhanced ability to care for critical care pediatric patients compared to community based PICUs. Tertiary PICUs can provide advanced respiratory support such as high frequency oscillatory ventilation. However, they would not be expected to provide ECMO support or transplantation services. In tertiary PICUs, the majority of pediatric medical and surgical services should be available, although in-house coverage would not be expected.

A Quaternary or Specialized PICU Facility

- Serves as a regional center and possesses a large catchment area likely to encompass tertiary and community based PICUs. These centers provide comprehensive services to all pediatric critically ill patients, including cardiovascular surgical services, transplantation services, and neurocritical intensive care services. This highest level of PICU would be capable of supporting an American College of Surgeons-verified level I or level II children's surgical center or Level I or level II pediatric trauma center.

COVID-19 Licensed Beds and Available Beds – Sample

Hospital	Licensed Beds	Licensed ICU Beds	Total Pediatric Beds	Inpatient Pediatric Total Beds	Surge Beds	ICU Total Pediatric Beds (PICU)
Alameda Hospital	66	0				
Alta Bares Summit (Oakland and Berkeley	800	101	1	1	43	
Highland Hospital	169	32				
Kaiser Permanente Fremont	100	10	0			
Kaiser Permanente Oakland	315	66	40	40		21
Kaiser Permanente San Leandro	215	50	8	8		
San Leandro Hospital	91	9				
Stanford Health Care ValleyCare Pleasanton	202	26	4	4		
St Rose	153	9				
Eden	130	24	1	1	28	
UCSF Benioff Children's	223	74	246	188	61	23 *
Washington	415	62	4		196	
Totals			304	242	1221	44

- The table above represents the number of beds that 24-hour emergency care facilities can expand beyond normal licensed bed capacity for inpatient and emergency care services. The total number of surge pediatric ICU beds is 44.

1.4 Access and Functional Needs

- All support for children will be compliant with the Americans with Disabilities Act (ADA). Support for such children will be provided to the extent possible and expanded upon as resources become available.

• **Person with Access and Functional Needs (PAFN)** - Definition:
○ Those in the community who may have additional needs before, during, and after an incident including but not limited to maintaining independence, communication, transportation supervision, and medical care.
• **Children with Special Health Care Needs**:
○ Children in the community who have significant behavioral, emotional, or physical health care needs. ○ They may be cared for at home or in residential treatment centers.
○ They may or may not be dependent on equipment and/or medication for their care. Examples of medical equipment may include feeding devices, ventilators, or wheelchairs.
• **Children (0-14 years of age)** are a **highly vulnerable segment** of the population in times of disaster.
○ Children in this age category comprise nearly 25 percent of the U.S. population and have significant and often complex planning and emergency response needs.
○ Under normal conditions, there are components at the governmental, private, and non-profit levels that form the networks on which children depend to support their development and protect them from harm. In addition to these systems, children fall under the supervision of their parents, guardians, and/or primary caregivers.
○ Once a disaster occurs, however, most or all these foundations in a child's life may collapse.

- **The American Academy of Pediatrics has established that children have unique physical and emotional needs when a disaster strikes**.
  - In addition to being placed at an increased risk of physical harm, children respond to illness, injury, and treatment differently than adults do.
  - They also rely on stable routines in their daily lives, and when a disaster occurs, the drastic changes to their known world endanger their safety and greatly frighten them.
  - To ensure the physical security and emotional stability of children in disasters, communities must modify their emergency planning efforts to include children's unique needs during disasters.
- **Access and functional needs populations may have additional needs before, during and after an incident** in functional areas, including but not limited to: communication, medical care, maintaining independence, supervision, and/or transportation.
  - Individuals in need of additional response assistance may include: children who live in institutionalized settings and children from diverse cultures, those who have limited English proficiency or are non-English-speaking, and/or those who are transportation disadvantaged.
- **Historically, in major disasters, children with access and functional needs suffered increased morbidity and mortality** due to a lack of general preparedness and community coordination with EMS and hospitals, such as lack of necessary equipment, staffing and instructions for community coordination.
  - Understanding and accurately estimating medical care requirements of the pediatric population with pre-existing medical conditions is critically important for preparedness planning and emergency response.
  - If this is not done, it is anticipated that patients who were previously stable and cared for at home will suffer medical crises when their support network is disrupted and significantly add to the surge burden being presented to EDs and hospitals.

- **Individuals in need of additional response assistance may include children who live in institutionalized settings and children from diverse cultures,** those with limited access to transportation, and those who have limited English proficiency or are non-English-speaking.
  - Response plans for children in disasters need to include resources and preparations for children with disabilities and special health care need.
- **Because of the limited availability of pediatric resources, such as pediatric ventilators and wheelchairs, the need for transfer capability of children with special needs out of a disaster area is heightened**.
  - This may involve the performance of large-scale interstate transfer of children with special health care needs and shelter resources for residents of all ages with disabilities.
- **Alameda County is committed to ensuring that considerations are made for children with access and functional needs at every stage of the emergency management process**.
  - Caring for access and functional needs populations in a disaster is part of the responsibilities of each leader in the emergency management organization.
  - The County maintain maintains compliance with the Americans with Disabilities Act.
- **Alameda County Functional Assessment Service Team (FAST):**
  - The Public Health Officer may deploy and coordinate local FAST members to assess the function and access needs of people in shelters, including children with disabilities and others with access and functional needs.
  - The FAST team inspects shelters and ensures that shelter residents with access and functional needs have the resources they require while staying in the shelter. They coordinate with state / local governments, and NGO's.

Alameda County Departments and OA EOC Roles to Support children (including Access and Functional Needs)

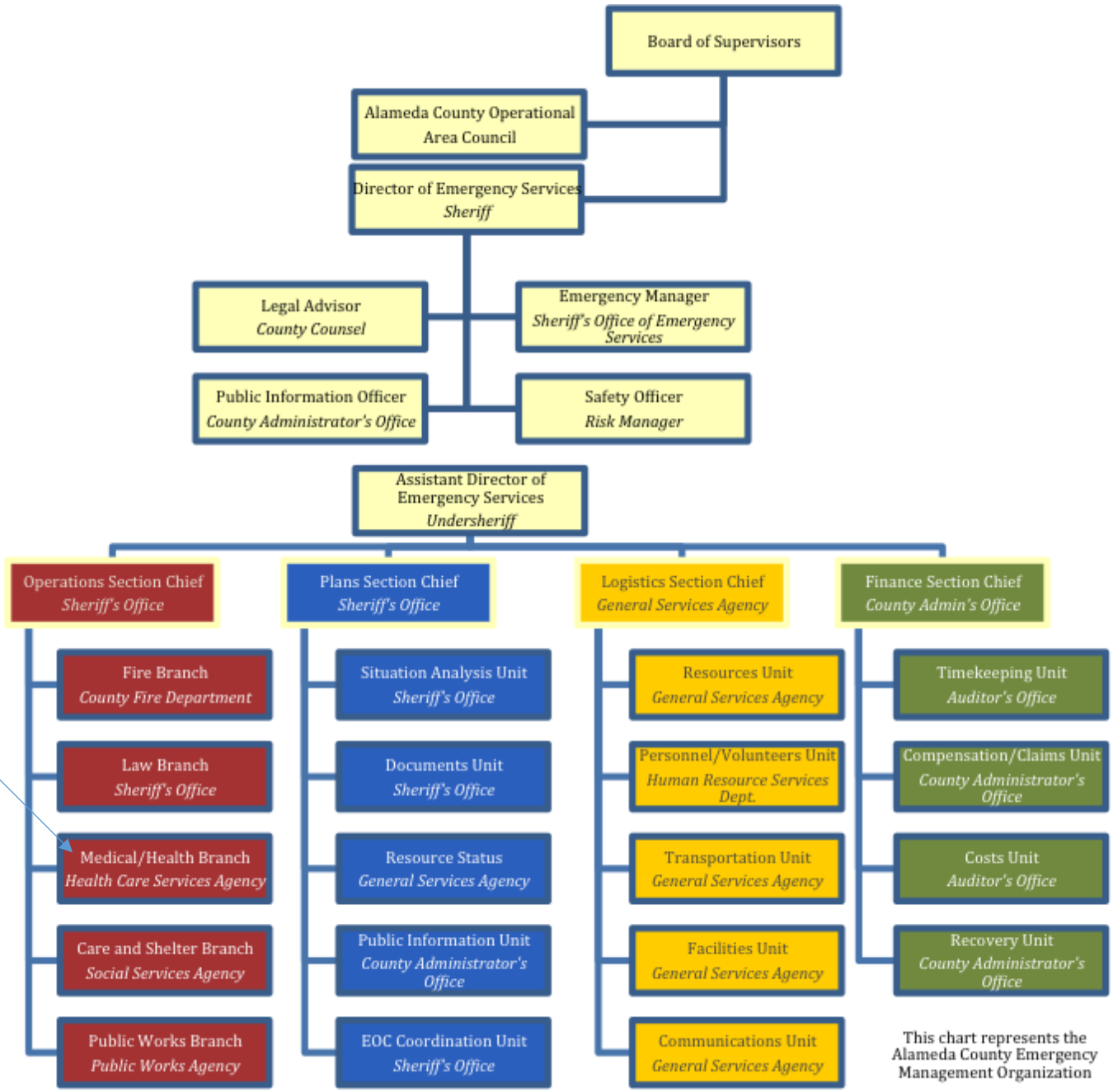
Social Services Agency/Operations Section: Mass Care and Shelter Branch	Health Care Services Agency (HCSA): Operations Section: Medical Health Branch	Probation Department/ Logistics Section	General Services Agency (GSA)/Logistics Section	Sheriff's Office/Operations Section/Law Enforcement Branch
• Supports children in mass care environments • Provides personal assistance services to support unaccompanied minors • Coordinates custody and reunification of unaccompanied minors through Department of Children and Family Services (DCFS) • Child care liaison (shelter, community)	• Assesses, oversees and provides support for: ○ Public Health Support ○ Medical Support ○ Behavioral health support ○ Environmental health and safety ○ Emergency Medical Services	• Manages minors within the detention system • Provides staff to support security and/or mass care operations	• Fulfills requests from response operational functions for child-specific supplies, equipment, and staffing • Provides transportation to move children to and from schools, child care facilities, and appointments	• Manages OA EOC and emergency management • Provides and coordinates security at mass care sites • Provides supervision for unaccompanied minors prior to their move to the social services system • Coordinates missing persons to support reunification processes

SECTION 2 – RESPONSE CONCEPT OF OPERATIONS

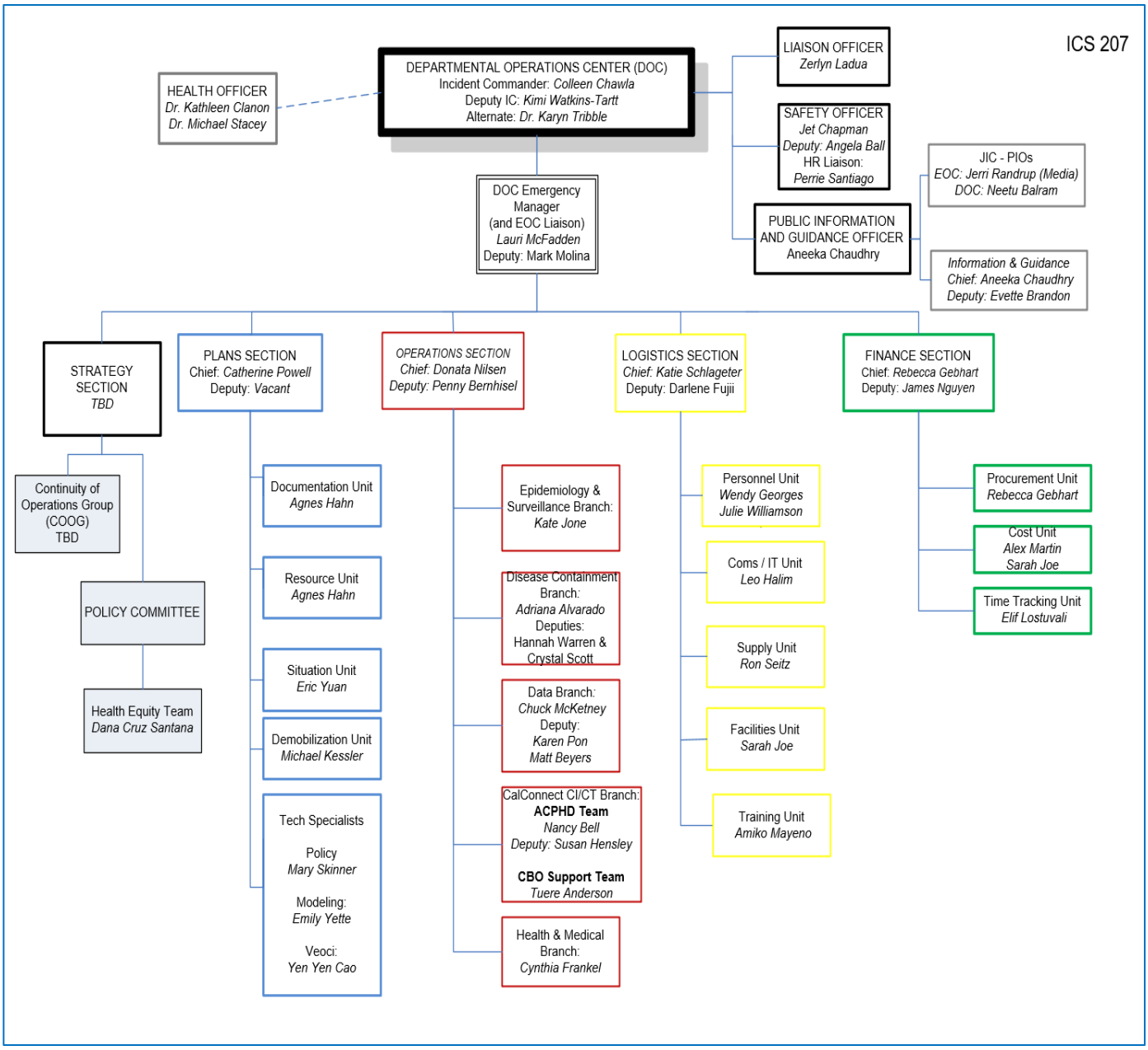
2.1 GENERAL COMMAND STRUCTURE AND COMMUNICATIONS

- **The official County operational area EOP is utilized for the Alameda OA EOC activations and demonstrates the overall coordination structure for all functions during disaster response operations.**
    - The HCSA DOC may be activated concurrently with the OA EOC to address the pediatric surge response needs.
    - The EOP demonstrates the overall coordination structure for all functions during disaster operations. Refer to the EOC organization and COVID-19 DOC organization below:

Alameda County EOC Organization



Alameda County HCSA DOC for COVID-19 Response Organization



SECTION 2 – RESPONSE CONCEPT OF OPERATIONS

2.1 GENERAL COMMAND STRUCTURE AND COMMUNICATIONS

OA EOC Command and Medical Health Branch- Functions and Responsibility for Children.

- The OA EOC or County Emergency Operations Manager (EOM) will coordinate response agencies and organizations for overall emergency management activities in support of children.
- The OA EOC or EOM will coordinate information and communication between local jurisdictions (cities), special districts, Regional, State and Federal response partners; facilitate mutual aid resources and activities for children.
- The OA EOC will facilitate vertical and horizontal communications and disseminate information with partners consistent with ICS.
- Within Operational Area EOC Medical/Health Branch (if activated), the MHOAC Program coordinates Health Care Services Agency functions for children and adults identified in Health and Safety Code §1797.153.

Regional and Operational Area Coordination

- **Alameda County ensures an essential regional approach, requiring linkages between the Disaster Preparedness Health Coalition (DPHC) including government response entities, outpatient providers, EMS providers and hospitals.**
- To effectively achieve a continuum of care, bridges are established between government and private entities, across health care systems, beyond catchment areas, and in a catastrophic event, across state lines.
- **Regionalization especially for pediatrics is needed to organize resources within a geographic area to ensure access to medical care of a level appropriate to the patient's needs, while maintaining efficient use of the available resources– "right care, at the right place, at the right time."** (consistent with the State Pediatric Surge Annex draft 2019).
- **The Region II RDMHS and the OA MHOAC coordinate to ensure resources are matched with need. The coalition is central to leveraging situation awareness and identifying system-wide needs.**

2.2 ACTIVATION AND NOTIFICATION

2.2.1 Activation

- **The Alameda County (ALCO) Pediatric Surge Plan may be activated in response to an event that has a disproportionate number of pediatric patients.**
  - This plan will be activated in the same way ALCO EMS functions daily using ReddiNet®.
- **The primary assumption is that an event has reached an Emergency System Activation Level 2 or 3 as defined in the California Health and Medical Emergency Operations Manual (EOM, outside of traditional general acute care facility day-to-day operations. Refer to table below**
- In accordance with SEMS, this plan may be activated by any of the following ALCO positions or entities:
  - The Medical Health Operational Area Coordinator (MHOAC) of his/her designee
  - The Public Health Officer, or his/her designee
  - The local EMS Agency Director or his/her designee
  - The local EMS Agency Medical Director

Activation Levels of Event Complexity	
Level 1	Requires resources or distribution of patients within the affected Operational Area only or as available from other Operational Areas through existing agreements.
Level 2	Requires resources from Operational Areas within Mutual Aid Region beyond existing agreements and may include the need for distribution of patients to other Operational Areas.
Level 3	Requires resources or distribution of patients beyond the Mutual Aid Region. May include resources from other Mutual Aid Regions, State or Federal resources.

Level 1 Public Health and Medical Incident

- A Level 1 Public Health and Medical Incident can be adequately mitigated using available health and/or medical resources from within the affected Operational Area or by accessing resources from other Operational Areas through existing agreements (including day-to-day agreements, memoranda of understanding, or other emergency assistance agreements).
- During Level 1 Incidents, a variety of response partners may be involved depending on the nature of the incident.
- The Medical and Health Operational Area Coordinator (MHOAC) should be notified of Level 1 Public Health and Medical Incidents, including the need for accessing resources through existing agreements, and assist in accordance with local policies and procedures. Public Health and Medical Incidents may require emergency system activation, including activation of Department Operations Center (DOC) or Emergency Operations Center (EOC) within the Operational Area.

Level 2 Public Health and Medical Incident

- A Level 2 Public Health and Medical Incident requires health and/or medical resources from other Operational Areas within the Mutual Aid Region beyond those available through existing agreements and may include the need for distribution of patients to other Operational Areas. During a Level 2 Public Health and Medical Incident, resource requests should be coordinated by the MHOAC program of the affected Operational Area. Public Health and Medical Incident will typically require assistance from the Regional Disaster Medical and Health Coordinator (RDMHC) within the Mutual Aid Region and may require emergency system activation, including activation of Department Operations Center (DOC) or Emergency Operations Center (EOC) within the Operational Area.

Level 3 Public Health and Medical Incident

- During a Level 3 Public Health and Medical Incident, the need for health and/or medical resources exceeds the response capabilities of the affected Operational Area and associated Mutual Aid Region. This determination is made from an assessment of health and medical resources relative to current and expected demands.
- **As with Level 2 Public Health and Medical Incidents, requests for health and medical resources are coordinated by the MHOAC Program within the affected Operational Area(s), working in conjunction with the RDMHC Program.**
- A Level 3 Public Health and Medical Incident will lead to activation of DOCs/EOCs within the Operational Area, Mutual Aid Region, and State. If there is a clear need for significant out-of-region resources, or if communication with the affected area(s) is not available, State and/or federal government response agencies may begin mobilizing and pre-positioning resources while awaiting local requests

Unusual Event

- It should be noted an event does not have to reach an Emergency System Activation Level 2 or 3 event prior to using these guidelines. Once an event has become as Unusual Event, as described below, the incident should be evaluated, and determination made if the use of the framework is appropriate to the event. The California EOM defines and “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 many 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;
- 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.

Resource Request Needs based on Levels

- The requesting of resources during a disaster will follow processes as outlined in the California State Emergency Plan (SEP), the California Public Health and Medical Emergency Operations Plan (EOM), the California Patient Movement Plan (PMP) and the Alameda County OAl MHOAC Program Manual.

Pediatric SMEs Integrated in Levels - Refer to Section 3.6 for SME definitions.

- At all levels of response, pediatric SMEs are utilized at the OA EOC Med/Health Branch to inform decisions and patient movement. SME's facilitate communication and links between sending facilities, EMS resources and receiving facilities, and assess and monitor gap between assessed need and hospital bed availability for OB, neonatal / pediatrics.

		Level 1 Incident (OA) Local resources sufficient	Level 2 Incident (region) Local resources insufficient	Level 3 Incident (state and beyond) regional or state resources insufficient
Definition		Requires resources or distribution of pediatric patients within affected operational area only, or as available from other operational areas through existing	Requires resources from operational areas within the mutual aid region beyond existing agreements, and may include the need for distribution of patients to other operational areas	Requires resources or distribution of patients beyond the mutual aid region. May include resources from other mutual aid regions, state, other states, or federal resources
Emergency System Activation		HCC **–** incorporation of clinical neonatal, pediatric, and/or OB **SME's** at both sending and receiving facilities, live or remotely Health/Medical DOC/EOC/MOC **–** MHOAC	HCC - **Pediatric SME's*** EMS DOC/OA EOC **–** MHOAC* REOC **–** RDMHS* Regional Patient Movement Coordination Center ** ***Pediatric SME's may be inserted at any location as available and indicated**	HCC - **Pediatric SME's*** DOC/EOC **–** MHOAC* REOC **–** RDMHS* Regional Patient Movement Coordination Center ** MHCC* **–** state level patient movement group** FCC/JFO ***Pediatric SME's may be inserted at any location as available** and
Tools		Internal facility/system disaster plans (e.g., decompression, surge) MOA/MOU/transfer agreements (catchment areas) OA MHOAC Program Manual OA Emergency Operations Plan EOM (for situational	EOM (for resource requesting) WRAP-EM PMP Other existing regional plans	SEP WRAP-EM National EMS Contract Regional (Western States) Partnerships Applicable federal plans

SECTION 2 – RESPONSE CONCEPT OF OPERATIONS

Activation Considerations

- While this plan **may be activated in response to any incident in Alameda County with a disproportionate number of pediatric casualties,** the plan **may also be activated prior to a declared or proclaimed emergency**.
  - In those cases, the gathering of information, assessment of the situation, and notification of health care facilities and providers will be emphasized to provide a basis for full implementation of the plan should an emergency be declared, and surge be required.
- **The declaration of an emergency along with other actions taken by the governor's office has significant impact on the ability to meet the demands created by a surge incident.**
  - Specifically, health care regulations may be relaxed or waived during a declared emergency. This allows the health care system to meet these demands in ways that it cannot when regulations are in effect.
- **It is assumed that the systems, structures, and guidance recommended within this plan will always be used after the hospital's emergency operations plan has been activated.**
  - Therefore, it is also assumed that the Hospital Incident Command System (HICS) will be used throughout the duration of the hospital's emergency response.
  - This plan does not replace or alter an institution's fundamental HICS structure but rather proposes to add additional specific functional components that may be utilized during emergency response.
- **The ALCO EMS Duty Officers and the MHOAC will monitor hospital bed availability using ReddiNet®, in collaboration with local hospitals and the Operational Area**.
  - The Medical / Health Branch at the OA EOC will work closely with the Hospital Incident Command System (HICS).
  - **Hospitals will report situational status and resource needs up through the OA EOC M/HB. The MHOAC will notify the state immediately upon activation.**

Levels of OA EOC activation include:

OPERATIONAL STATUS	DESCRIPTION
Surveillance	**The incident or event can be effectively managed at the field level. The Duty Officer monitors information sources regarding the incident or event in collaboration with the Health Officer on call.**
Partial Activation	**Incident management complexity is increased, and it is determined that partial staffing of the OA EOC and/or HCSA DOC is warranted to provide adequate support for field operations, local health care provider operations, local/OA EOC operations, or RDMHC/S resource requests.**
Full Activation	**Incidents are of such magnitude that coordination of the response(s) at the scene or another location is not possible; full staffing of the OA EOC and/or HCSA DOC is necessary to provide the support for health and medical operations.**

This ConOPs section supports the County EOP. Direction and guidance from the OA EOP are applicable to this Pediatric Surge Annex. The Annex county tasks and requirements are coordinated and managed in the OA EOC. The goals specific to children will include:

- Shared situational awareness and a common operating picture.
- Coordination with and integration of Local jurisdictions, OA (County), Region, State, and Federal agencies and organizations.
- Shared resource and operational status information including coordination to avoid duplication of requests for common resources.
- Information management and dissemination with OA supporting partners and stakeholder agencies and organizations.

2.2.2 Notification

- Upon activation of the OA Pediatric Surge Plan, the hospitals in the coalition will be responsible for activation of their HCCs,notifying the EMS Duty officer and initiating their internal EOPs, Multi-Casualty Incident (MCI) alert, and/or Pediatric Surge Plans as needed, and expand hospital capacity.
    - Each individual hospital will determine specific strategies to meet their surge target.
- The EMS Duty Officer will notify the MHOAC, EMS ICS group, local hospitals, Health Officer, County Health Care Services Agency Director, and OA Office of Emergency Services.
    - The MHOAC will notify appropriate stakeholders and coordinate a threat assessment conference call, as needed.
- Notifications shall occur via pre-identified advanced and conventional communications systems includingbut not limited to, the following:
    - ReddiNet EMS Notification (Initiated by LEMSA) – Message Flash Report
    - Telephone
    - Email
    - Radio Communications (MHOAC can broadcast a general alert message to connected health care facilities within the OA)
    - ReddiNet Notification (Regional or Local notification placed by RDMHS – Regional or MHOAC – Local)
    - Everbridge DHV system (Initiated by local DHV Administrator via the MHOAC and or State DHV if additional staff is needed to manage surge)
    - Everbridge AC Alert notification
- Notifications should include a general statement of the nature of the Pediatric Surge. Number of patients and MCI triage acuity (if available). (Do not include specific patient information.)

EMS Activation and Notifications – Operational Response Tool

PEDIATRIC EMS ACTIVATION CHECKLIST *** Module 1

2.3 Roles and Responsibilities

Organization and Assignment of Responsibilities

- During an incident with significant 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 in providing care to children is crucial to the response.
- The table below lists the responsibilities of the local coalition health care facilities and supporting entities.

PARTNER	ROLES AND RESPONSIBILITIES
EMS DUTY OFFICER	• Initial notifications
LEMSA	• MHOAC Functions • Activate EMS DOC or OA EOC M/HB • Coordinate Situation Status & Resource Requests
ACRECC	• Initial notifications patient dispersal • Tracking patient destinations
MHOAC	• Notification of pediatric stakeholders • Conduct conference call (if needed) • Coordinate medical health resources • Process medical health mutual aid requests
HOSPITALS – Pediatric Specialty Centers	• HICS • Triage & treatment • Decontamination (if needed) • Tracking • Secondary facility transfers • Critical Care Expansion • Decompression • TRAIN • Provide victim/casualty information to FAC POC • Reporting SitStat tRequest Resources • SMEs • Activate HCCs
HOSPITALS – Non-pediatric specialty hospitals	• HICs • Triage/stabilization • Provide bed space for older children • Additional health care workers • Critical Care expansion for older children
Clinics / Primary Care / Community Health Centers	• Additional health care workers; • SMEs
Other HCFS	• Additional health care workers; SMEs
911	• Triage patients; Field decontamination (if needed) • Transport to health care facility • Patient dispersal • Tracking patient destinations; Communications
IFT	• Transportation of patients between facilities • Secondary Transfer
Field Level EMS/First Response	• Triage patients; Field decontamination (if needed) • Transport to health care facility
Office of Emergency Services	• Assist coordinating pediatric requests for Mutual Aid resources • Initiate Family Assistance Centers Notifications to families of victims/casualties
Public Health	• Public Health Officer Local Health Emergency Declaration (if needed)
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 • Conduct investigations (if needed)
Skilled Nursing Facilities	• Provide bed capacity
Behavioral Health Acute Care	• Adolescent psychiatric care
Specialty Clinics (Pediatric)	• Provide pediatric consultation services to hospitals

2.4 Logistics – 4Ss – 3Cs

2.4.1 Definitions

The underlying annex foundation is based on the surge definitions and concepts provided below:

Surge Capacity
Defined as ability to manage a sudden influx of patients and to expand care capabilities to meet sudden and/or more prolonged demand for patient triage and treatment. • Therefore, patient age and acuity need to be considered when determining where children will be treated.
Surge Capacity – Hospital Expansion Plan
• Surge capacity is the health care system's ability to expand quickly beyond normal services to meet an increased demand for medical care in the event of a disaster or large-scale public health emergency.
• The plan is guided by the following surge capacity principles:
○ Would be activated in response to an event that has a disproportionate number of pediatric patients.
○ Expand hospital's existing capability – each hospital will determine what specific strategies to implement to meet their surge capacity target.
○ Hospitals that currently care for pediatric intensive care, pediatric acute care, and neonatal intensive care patients would be requested to take care of the most critically injured children.
Surge Capacity Goal
• The goal during a medical surge event is to maximize surge capacity strategies that mitigate the crisis while minimizing the risks associated with deviations from conventional care. • Choosing the strategies that are most appropriate to the situation and pose the least risk to the patient and provider first, and then proceeding to riskier strategies as demand increases and options decrease, is the preferred path.
Surge Capability - The ability to manage patients requiring very specialized medical care.
Pediatric Specialty Surge Event
○ An event in which the number of specialty pediatric patients exceeds capability of the local pediatric specialty center.
Resource Matching
○ Addresses issues of availability of surge resource assets: space, personnel, medications, supplies and equipment specific to the pediatric patient population.

Medical Surge Determinants

- In a disaster, the number of patients presenting for care may cause a surge.
- Surge is determined by the number of patients a hospital can receive while maintaining usual standards of care.

Surge Measurements 4Ss

- **For each of the critical system components needed to respond to a medical surge incident, space, staff, and supplies (3Ss), these three surge measurements of assessment guide overall surge capacity at each of the tiered levels.**
  - **Alameda County surge capacity/capability determinations include Systems (Command Management) with the 3Ss which is known as the 4Ss**
- An incident does not have to overwhelm assets in all of the categories to impact health care. Refer to definitions below:

Surge Capacity Levels -3Cs

Alameda County hospital surge capacity and the 3Cs levels of care can be provided in catastrophic scenarios:

- **Conventional care**
  - *During conventional care, customary routine services are provided through standard operating procedures. Usual resources and level of care provided. For example, during a surge in patients, maximizing bed occupancy and calling in additional staff to assist.*
  - **Space, staff and supplies** are consistent with daily practice within the institution used during a multi-casualty incident (MCI) that triggers activation of the facility emergency operations plan. In this case, expectations would be for expansion of critical care by as much as 20% above baseline ICU maximum capacity using facility resources.
- **Contingency Care**
  - *Provision of functionally equivalent care that may incur a small risk to patients. Care provided is adapted from usual practices. (e.g., boarding critical care patients in post-anesthesia care areas using less traditional, but appropriate resources.*
  - *During contingency care, care provided is functionally equivalent to routine care but equipment, medications, and even staff may be used for a different purpose or in a different manner than typical daily use (e.g., substituting one antibiotic for another that covers the same classification). The demands of most incidents can be met with conventional and contingency care*.
  - **Space, staff and supplies are not consistent with daily practice** but maintain or have minimal impact on usual patient care practices. These spaces or practices may be used temporarily during an MCI or on a more sustained basis during a disaster. In this case, expectations would be for expansion of critical care by at least 100% above baseline ICU maximum capacity to meet patient demand using local and regional resources.
- **Crisis Care**
  - *Disaster strategies are used when demand forces choices that pose a significant risk to patients but is the best that can be offered under the circumstances. For example, cot- based care, severe staffing restrictions, or restrictions on use of certain medications or other resources. State ratio waivers should be considered. Crisis care falls at the far end of the spectrum when resources are scarce and the focus changes from delivering individual patient care to delivering the best care for the patient population.*
  - **Adaptive spaces, staff and supplies** are not consistent with the usual standards of care but provide sufficiency of care in the setting of a catastrophic disaster, providing the best possible care to patients given the circumstances and resources available. In this case, expectations would be for expansion of critical care by at least 200% above baseline ICU maximum capacity to meet patient demand using local, regional, state, interstate and national resources.

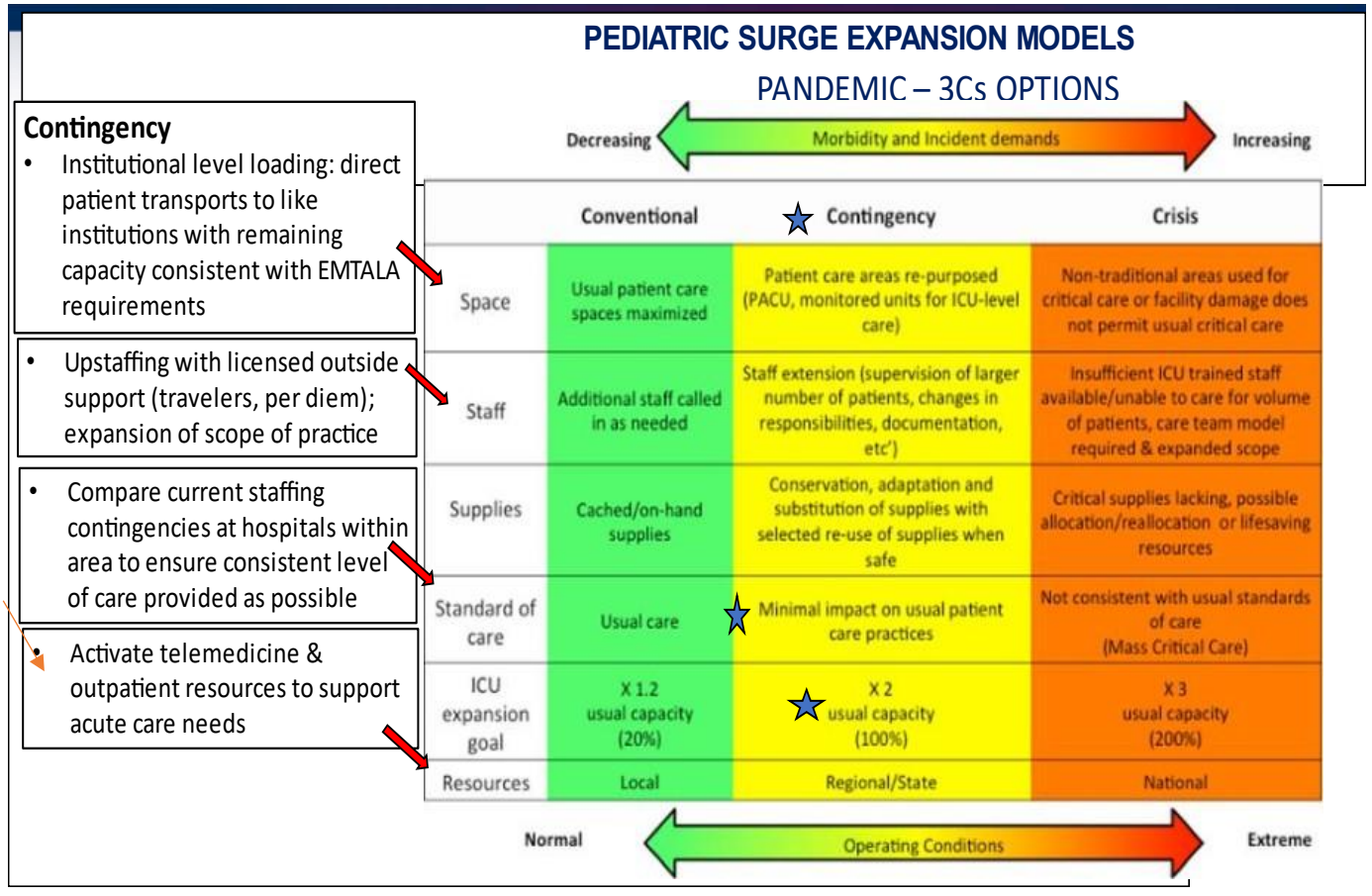
Crisis Options – Children's Tertiary Care/Specialty Centers

- Concentrate care for children at pediatric centers to preserve necessary pediatric systems, including accepting any pediatric transfers, even ones for whom they may not typically care
- Increasing pediatric age thresholds to 21, 25, or 30 years iteratively as surge requires (as long as no adult comorbidities exist that are not consistent with pediatric critical care practice)
- Pediatric centers should regionally activate pediatric triage when shared pediatric resources (accounting for transportation capacity) are exhausted, with mortality predictions subject to expert opinion, which should be agreed on and documented by members of treating team. Prior to movement to higher triage levels, especially considering such steps being unlikely to mobilize resources, discussions should be held regarding movement of ventilators to pediatric centers from adult sites if there is a difference in resource demand.

Contingency and Crisis Standards of Care Options and Considerations

Crisis Pediatric Intensive Care Unit Restructuring
Capacity:
• Increase ICU bed capacity by incorporating ~20 beds from step-down unit
Staffing:
• Increase ICU faculty/fellow coverage
• Deploy nursing and respiratory teams to adult care
• Designate triage roles to facilitate system-wide coordination
Bedside Care:
• Position IV pumps and ventilator consoles outside of rooms
• Coordinate bedside care with ICU nurses, respiratory therapists, PT/OT
• Balance optimal patient care and safety of health care workers

Potential Medical Surge Response Strategies *** Module 2 TTX



2.4.2 PEDIATRIC CRITICAL CARE EXPANSION PLAN

PEDIATRIC CRITICAL CARE EXPANSION OPTIONS *** Module 2 TTX

Principles and Assumptions

- Plan would be activated in response to an event that has a disproportionate number of pediatric patients.
- In a medical surge disaster event, many patients may require a high level of acute care as normally provided in an ICU. Increased hospital ICU/PICU/NICU capacity will be a priority.
- In a declared disaster – pandemic or large MCI event, Alameda County EMS may need to expand the system-wide hospital pediatric staffed bed capability.
- Priority is to transfer the most critical and then youngest patients (<8 years old) as early as possible to an appropriate referral center.
- Hospitals that currently care for pediatric intensive care, pediatric acute care, and neonatal intensive care patients would be requested to take care of the most critically injured children.

Goal

- Increase pediatric medical surge capacity and capability using hospital capability tiered approach and expansion for critical care during an MCI/disaster event
- Expand hospital's existing capability – each individual hospital will determine what specific strategies to implement to meet their surge capacity target.

Pediatric Medical Surge Plan - CONOPS

- This plan is founded on a tiered system based on capacity and capability. Therefore, patient age and acuity need to be considered when determining the location where children will be treated.
- Given the variability in pediatric care on a daily basis, all hospitals are requested to plan for an event resulting in a surge of pediatric patients. Although hospital capabilities and capacity vary, all hospitals will need to participate to meet the medical surge needs of children.
- This plan is based on caring for more critically ill children in facilities that are accustomed to caring for children and allowing them to decompress less critically ill children to other facilities.

Hospital Capability Tiered Approach

- Patients should be distributed to an appropriate level of care given the specific circumstances of the situation. The tiered options provide general guidelines that may be used in a surge that disproportionately affects children as a method for supporting distribution of patients throughout the County.
- A pediatric medical subject matter experts should be consulted in the triage and distribution of patients when operationalizing this plan (including at the OA EOC if activated)
- Pediatric acute patients would be cared for in facilities that may or may not typically care for children. Goal would be to triage older (over age 8), more stable patients to facilities not accustomed to caring for children.
- The plan includes using existing PICU capacity and expanding that PICU capacity as much as possible during a surge situation. All facilities with existing PICUs would need to meet the surge for additional PICU patients. The adult trauma centers and their ICUs would also need to expand capacity and their capability to meet the PICU need. This plan calls upon hospitals with PICU capability to accommodate the surge of PICU patients. This may require a shifting of non-critical patients from these facilities so that the most critically ill children are cared for at hospitals that are accustomed to caring for and treating critically ill children. The remainder of the hospitals will be called upon to meet the pediatric acute

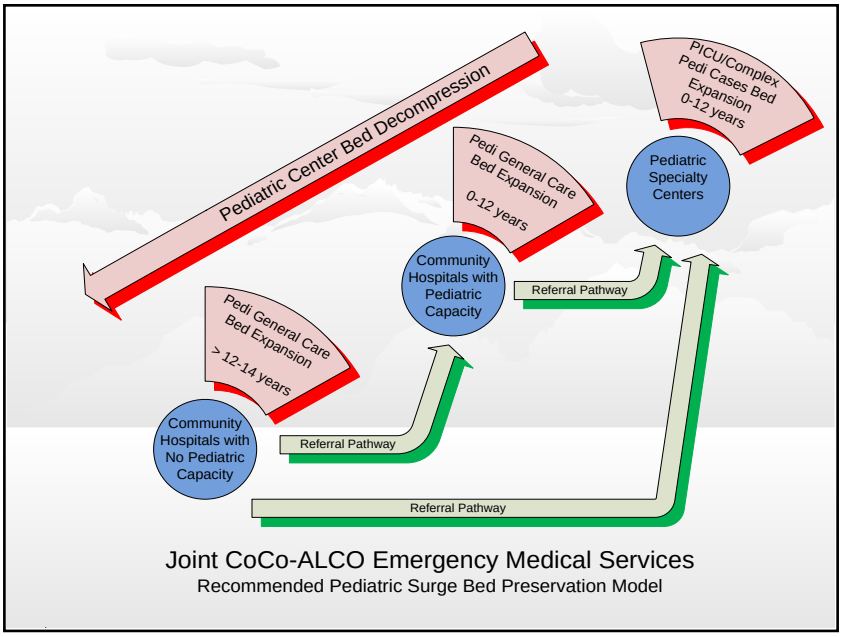
care surge need. This means that as an event unfolds, there may be a need for secondary transfers of patients to move more stable patients to alternate locations.

Hospital Capacity Expansion Strategies – for Critical Care ICU/PICU/NICU ***** Module 2 TTX**

HOSPITAL PEDIATRIC TIERED EXPANSION OPTIONS – FOR CRITICAL CARE ICU/PICU/NICU
The following hospital bed expansion options for critical care will be considered.
UNDECLARED DISASTER
1. **OPTION 1A** : • All hospitals use 5% flex to increase their inpatient PEDIATRIC critical care capacity by 5% in PICU and ICU (not to exceed total allowed licensed beds).
DECLARED DISASTER
1. **OPTION 1B**: • All hospitals increase their PEDIATRIC beds over their licensed bed capacity by 5% in PICU & ICU (above total licensed capacity).
2. **OPTION 2** • All hospitals in Alameda County with ICU or PICU beds, double their number of staffed ICU and PICU beds.
3. **OPTION 3** • All hospitals take 5 additional PEDIATRIC patients in their ICU and PICU.
4. **OPTION 4** • All hospitals increase their PEDIATRIC beds over their total licensed bed capacity by 10% in ICU and PICU.

HOSPITAL CAPABILITY (BASED ON LICENSED BEDS)	**DESCRIPTION**
CRITICAL CARE FOR PEDIATRICS	
- PICU (UCSF Benioff Children's Hospital; Kaiser Permanente Oakland)	PEDIATRIC PICU
- NICU	NICU
- ICU	ICU
- TRAUMA CENTERS	ADULT & PEDIATRIC TRAUMA CENTERS
GENERAL MEDICAL/SURGE CARE FOR PEDIATRICS	
- GENERAL PEDIATRIC BEDS	PEDIATRIC ACUTE BEDS
- GENERAL MED/SURGE BEDS; NO LICENSED PEDIATRIC BEDS	
NO INPATIENT PEDIATRIC BEDS	
- NO PEDIATRIC CRITICAL CARE; NO PEDIATRIC BEDS - - - - - EMERGENCY ROOM ONLY	

HOSPITAL CAPACITY EXPANSION STRATEGIES – FOR CRITICAL CARE ICU/PICU/NICU



To accommodate the initial stabilization and treatment the EMS system must have a triage system in place that will maximize the potential for pediatric patients being taken to a hospital that has the resources for adequate care.

Surge plans must be adaptable to meet the needs of any event and corresponding surge response. The diagram below illustrates how a surge response may change with increasing needs:

Hospital Surge Measures

Maintaining Daily Operations
- Discharge and transfer patients, including adults when applicable, to increase the number of available pediatric beds
- No significant modifications in daily pediatric operations required

Modifying Pediatric Operations
- Increase the number of pediatric beds within the pediatric department
- Access department dimensions to ensure that additional beds can be accomodated in a given space

Modifying Facility Operations
- Utilize non-pediatric space within the facility for pediatric patients
- Use monitored beds first

Extrinsic Operations
- Order extrinsic pediatric mobile facilities
- Evacuate to facilities in unaffected areas

MODULE 2 TTX

Pediatric Surge Capability – Assessment (Conducted During the COVID-19 Pandemic Response 2020 - Sample) – *Check Data*

System Name	Hospital Name	Licensed Beds	Licensed ICU Beds	State 40% Surge Objective	Ability to Meet Capacity – Adult & Pediatric
Alameda Health System	Alameda Hospital	66	0	26	Yes
	Highland Hospital	169	32	68	Yes
	San Leandro Hospital	91	9	36	Yes
Alecto Health care Services	St. Rose Hospital	153	9	61	
Kaiser Permanente Northern	KP Oakland Medical Center	315	66	126	Yes- Pediatric Capability Vent procurement almost tripled
	KP Fremont Medical Center	100	10	40	Yes Vent procurement almost tripled in 2020
	KP San Leandro Medical Center	216	50	86	Yes - includes surging from 20 ICU beds to 70
Stanford Health cCare	Stanford Health Care – ValleyCare	202	26	81	
Sutter Health	Eden Medical Center	130	24	52	Yes can double up pts in room and can surge up to 54 ICU beds using all vents
	Alta Bates Summit Medical Center	800	101	320	Yes
UC Health	UCSF Benioff Children's Hospital Oakland	223	74	89	Plan is to take all pediatric patients in the county.
Unclassified	Washington Hospital Healthcare System	415	62	166	Yes Offering 21 spaces in decommissioned area of hospital.
8 Systems	14 Facilities	2979	473	1308	4287

Sources: CDPH Reports, Medical Health Branch interviews with hospitals

differs from CHA

COVID-19 Pediatric Surge Data

- During the COVID-19 pandemic, the pediatric available resources were identified and available (i.e., pediatric referral centers, sub-specialists, telemedicine capabilities, etc.).
- The EMSC and HPP LEMSA Coordinator leads the WRAP-EM Surge Group to access COID-19 data and resources. **Refer to Section 3.12 Appendix.**
- CDPH/CHA sends daily reports with the Alameda County Surge capability with pediatric surge data.
- SMEs for telemedicine and pediatric critical care are significant assets for pediatric surge.

2.5 Special Considerations – Event Specific

2.5.1 Behavioral Health *** Module 3 TTX

Behavioral Health support will be managed through the OA EOC Medical /Health Branch and HCSA DOC if activated.

- Alameda County Behavioral Health Care Services (BHCS) will
  - Assess NGO/CBO mental health resources.
  - Assess and implement support for the mental health needs of children within the disaster response operation and/or affected area.
  - Provide Mental Health Counseler to support children in shelters including those who have been identified with pre-existing mental health issues.
- The OA Behavioral Health Care Services will ensure the continuation of care, treatment, and housing for persons who were existing clients residing within the County mental health system before the incident/event.
- If a child requires greater mental health support than is available at a shelter, mental health providers will consult with the Behavioral Health Care Services Agency and/or the OA EOC Medical/Health Branch for additional assistance or transfer of the child to a health care facility. If a child is transferred, the child's parents/guardians will remain with the child through admittance and be provided support, if needed, for visitation.
- BHCS may coordinate with the Red Cross to activate the Red Cross Disaster Mental Health staff if feasible to provide appropriately credentialed mental health volunteers at shelters.
- BHCS will coordinate continued support from community counseling resources and/or mental health referrals with specific expertise in counseling children if possible.

HOSPITALIZATION CONSIDERATIONS - Children

- *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 stay 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*

Refer to links below and Section 3.8 for additional information

- Developmental Level-Specific Guidelines for Treating Children in the Hospital
- PsySTART Rapid Pediatric Mental Health Triage System - https://www.acep.org/how-we-serve/sections/disaster-medicine/news/june-2017/the-psystart-rapid-mental-health-triage-system/
- NCTSN (The National Child Traumatic Stress Network) Resources Related to Understanding Child Traumatic Stress

Alameda County EMS Website links:

MENTAL/BEHAVIORAL HEALTH RESOURCES

- Meeting the Challenges of Pediatric Behavioral Emergencies: Article written by Cynthia Frankel, RN, MN; Brian Blaisch, MD; and Bruce Hagen, EMT-P for Fire Engineering Online magazine.
- Management of Behavioral Emergencies for EMS Providers (Presentation)
- Mental Health History Form for 5150 (AB 1424)

HOSPITALIZATION – TRAUMA CONSIDERATIONS - Children

- **Children may display signs of trauma through their behavior, mood, and interactions with others. Key factors:**
  - Behavior may manifest as those of younger children.
  - Watch for withdrawal as this may signal a symptom of PTSD that will distance children from adults who could provide support.
  - Typically, girls are more likely to express anxiety and sadness; boys tend to display more behavior problems.
- **Short and long-term impacts of trauma that may delay children's developmental growth:**
  - *Infants*: may display sleep and feeding problems, irritability, and failure to achieve developmental milestones.
  - *Preschool children*: may exhibit separation anxiety, dependence, clinginess, irritability, misbehavior, sleep disturbance, withdrawal.
  - *School-aged children and adolescents*: may include those listed above as seen in younger children as well as somatic complaints, anxiety, change in academic performance, guilt, anger and hate, and preoccupation with death.
  - Traumatic events have profound sensory impacts on young children. Their sense of safety may be diminished due to frightening visual images, loud noises, violent movements, and other sensations associated with memories of the event. This overwhelming stress may limit children's ability to effectively communicate what they feel or need.
- **Stepped Care Approach**
  - Early Interventions - Early in the post-impact phase, supportive interventions should include:
    - Ensuring the child's safety and protection from additional harm.
    - Address immediate physical needs.
  - Provide reassurance with age appropriate, accurate and measured information. Along with avoiding unnecessary or graphic details.
  - Take care to minimize exposure to traumatic aspects of the event.
  - Validate experiences and feelings.
  - Move to restore routine or schedule when possible.
  - If possible, pediatric mental health professionals can help other health professionals, such as Hospice counselors, and family members with the process of death notification.
  - Reuniting family members should be a priority.
- **Factors that suggest need for immediate mental health services for children:**
  - Dissociative symptoms such as detachment, extreme confusion, or daydreaming.
  - Inability to concentrate or make simple decisions.
  - Evidence of extreme cognitive impairment or intrusive thoughts.
  - Intense fear, anxiety, panic, helplessness, or horror.
  - Uncontrollable and intense grief, suicidal ideation or intent.
- **Assessment and Screening - Assessment should include:**
  - A history of the child's exposure and reactions.
  - The extent of assessment should be based on level of exposure.
    - When children or close family members have been directly exposed, the children may require more comprehensive assessment
    - Children with less direct exposure may also need attention.
  - Education to children and their parents about trauma reactions and coping.
  - Encouragement of questions to correct misperceptions.
  - Ask children directly about their experiences. They may not spontaneously describe their feelings without prompting.
  - Screening to identify children at risk and those needing referral can be conducted with symptom rating scales.
  - Rating scales can include measuring type and degree of exposure, subjective reactions, personal consequences, PTSD symptoms.
  - Identify accommodations for children with disabilities or other functional needs which might not be readily apparent.
    - (Ped Disaster Preparedness Topical Collection: Ch.4, p.6-8)
- **School-Based and Community Interventions**

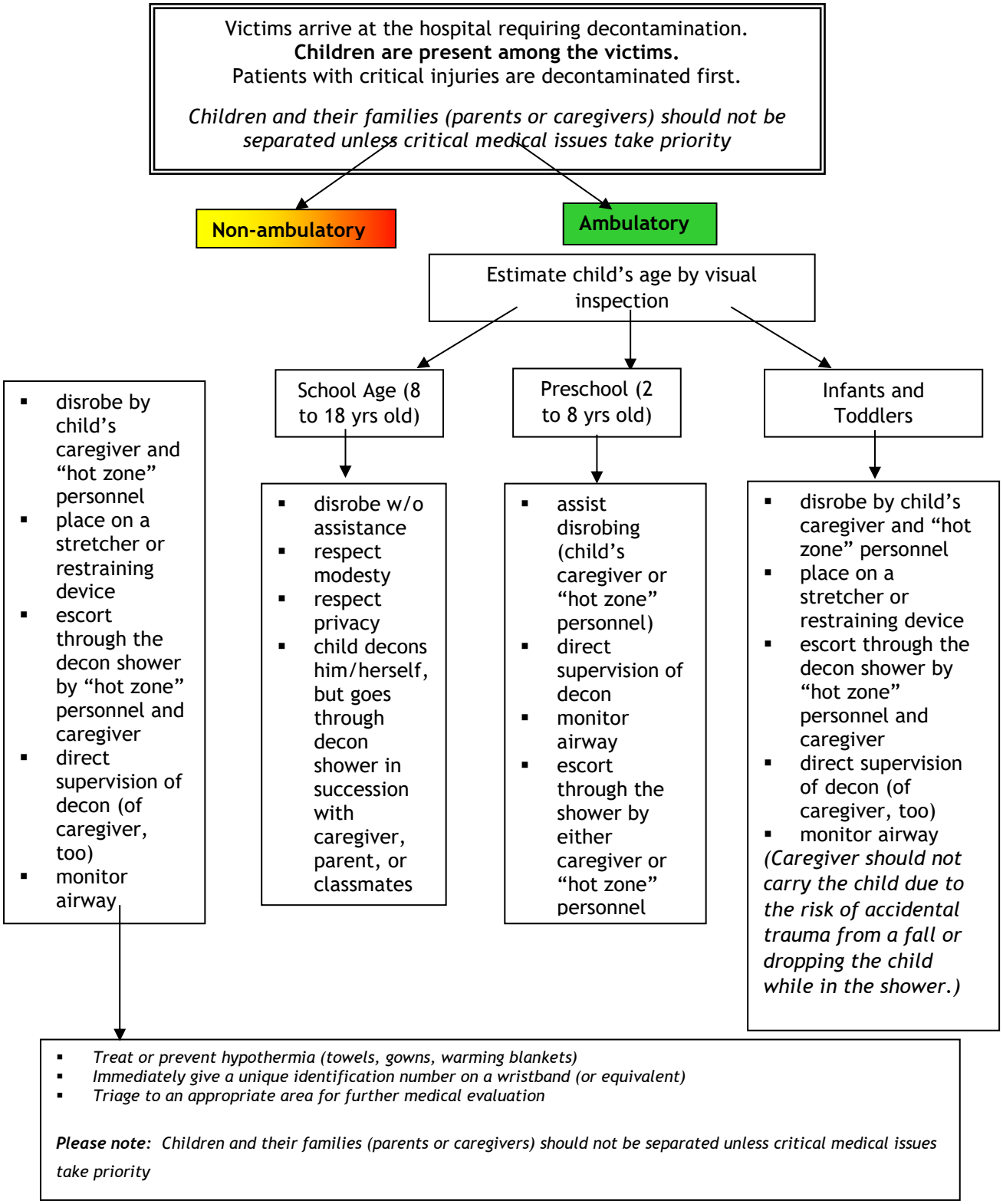
○ Schools are an optimal setting to deliver mental health services to children and families after a disaster. They provide access to children, encourage normalcy, and minimize stigma. PTSD and associated symptoms are likely to emerge in the school setting.
○ The use of play and art may aid in assessment while also being useful in treatment. This can be delivered through the schools, community centers, faith-based facilities, and organizations that specialize in youth services.- -
AAP- (Ped Disaster Preparedness Topical Collection: Ch.4, p.8-9)

2.5.2 Decontamination

Decontamination of children requires skills and equipment to prevent effects such as hypothermia and psychological trauma to youngest kids. The following recommendations are intended to facilitate decontamination of all children presenting to any hospital during a disaster in a timely manner. Both prehospital and ED personnel must be prepared to switch to "disaster" triage that incorporates pediatric physiologic differences. Children require special considerations that may not be addressed in a general Hospital Decontamination Plan.

Decontamination 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.
• Infants, children, and adolescents have anatomical, physiological, psychological, and developmental characteristics that are different than the adult population.
• First responders and hospital providers should be prepared to deliver age-appropriate care, including decontamination.
• Infants and children can have limitations in communication skills, self-care, independence, supervision, and transportation.
• Infants and children may not be able to answer triage questions about their symptoms, or to follow instructions given to them.
• Children and adolescents could be encouraged to do self-decontamination such as clothing removal and showering.
• Ideally, decontamination of infants, children, and adolescents will maintain family units to maximize efficiency, minimize psychological trauma, (from disrobing in front of others), and possibly improve physical outcome.

Decontamination



2.5.3 Evacuation

- Protective actions such as **evacuation** and shelter-in-place have become more important to emergency management operations in previous years, requiring a more comprehensive look at concepts and principles that plans should be built around and considerations that are critical to ensuring effective implementation.

    - *Over eight million people across the nation were affected by evacuation orders in 2017, including:*
        - *Flooding in February near the Oroville Dam in California caused an evacuation of over 180,000 people ;•*
        - *Hurricane Harvey struck Texas in August and resulted in the evacuation of over 780,000 people ;*
        - *Hurricane Irma struck Florida in September and resulted in evacuation orders covering a record 6.8 million residents;*
        - *In October, wildfires in California forced the evacuation of over 100,000 residents.*

- These disasters illustrate that the use of evacuation and shelter-in-place as protective actions are commonplace regardless of the threat or hazard. The challenge is to tailor the protective actions to best address a variety of factors, including a community's demographics, location, infrastructure, resources, authorities, and decision-making processes as found in the following document.
  https://www.fema.gov/sites/default/files/2020-07/planning-considerations-evacuation-and-shelter-in-place.pdf

Evacuations of children

- In some emergency situations—fire, explosion, and some weather and geological events—it will not be safe to stay in or around your facility.

- Areas where large numbers of children may be vulnerable and require evacuation include:
    - Schools
    - Residents in Group Facilities (e.g., childcare programs, residential care facilities)
    - Children at Public Sites Evacuation (e.g., movie theaters, cultural centers, malls)
    - Children on a Group Trip (e.g., school field trip)
    - Children from Medical Facilities
    - Minors in Detention Facilities
- ***Evacuation of neonatal infants will require specialized modes of transport.***

Hospital Evacuation

- Transfer of patients from a hospital would use the internal Surge Transfer Process for identifying bed availability.
- Evacuation requires coordination with the Alameda County OA EOC Medical/Health Branch if activated or the MHOAC if the EOC is not activated.
- **Alameda County recommends the TRAIN Model for internal hospital evacuation.**
- **Refer to table below and Section 3.5.**

TRAIN™ (Triage by Resource Allocation for Inpatients)
• **A patient typing and ambulance asset triage tool, designed to maximize efficient use of paratransit, BLS, ALS, CCT and Specialized Ambulance services during a large disaster.**
• It categorizes inpatients according to their resource transportation needs during an evacuation or mass casualty event requiring increased surge capacity.
• **It accurately assesses patients quickly and easily to determine transportation needs, which allows facilities to request and receive resources required for evacuating patients to other facilities in a disaster. However, TRAIN™ does not type inpatient beds.**
• The tool is used to determine the number of each level of transportation required for evacuation. Appropriate levels of transportation are based on local EMS transport guidelines and protocols.
• **The tool does not determine the level of care or acuity of the patient or identify the receiving institution for an evacuated patient. It is most powerful when all institutions in a region use it to facilitate collaboration and communication.**
• It allows:
○ **Rapid determination of resource requirements for pediatric transport**
○ Augmentation of surge capacity by identifying candidates for rapid discharge or transfer to lower level of care
○ **Communication with receiving institutions and supporting agencies**
○ More accurate resource requesting
○ **Streamlined communication with common code.**
○ Implementation of standardized and automated inpatient hospital evacuation triage system with minimal impact to workflow
○ **Increased awareness and disaster preparedness across a facility**
○ Greater understanding of gaps between transport needs and available resources at local and regional level which will need to be allocated across the county, state, and nation, depending on magnitude of disaster
(Resourced from Perinatal, Neonatal, and Pediatric Surge Annex to the California Patient Movement Plan stays - DRAFT January 2020. Additional resources in References)

Refer to Section 3.4 for additional information.

2.5.4 Specialty Pathogens / Infection Control / COVID-19 / MIS-C

- As the COVID-19 pandemic has illustrated, infectious disease outbreaks can create a surge in patients and overwhelm local hospital systems.
  - It is possible that a novel infectious disease could impact children exclusively or to a much great degree than adults.
  - Because pediatric resources are limited in both scope and location, a surge of exclusively pediatric patients would have devastating effects on the pediatric health care infrastructure.
  - The same components of surge response would apply to infectious disease, focusing on space, staff, and supplies.

- Alameda County **Infectious Disease Emergency Response (IDER) Plan** was adopted as the coalitions' response plan for infectious disease emergencies.
  - Activation of the Infectious Disease Emergency Response Plan will be coordinated with and through the Alameda County Health Services Agency's Department Operations Center (DOC) (if activated).
  - Hospital Command Centers may also be activated in response to an infectious disease emergency and will coordinate response activities with the OA EOC Med/Health Branch and HCSA DOC.

INFECTION CONTROL Resources

- 2020 Alameda County Field Manual - **http://ems.acgov.org/ClinicalProcedures/FieldTreatmtProtocols.page?**
- CDC Information MIS-C: Case Definition; Clinical Presentation - **https://www.cdc.gov/mis-c/hcp/**
- **COVID-19 Alameda County School, Childcare, and Camp Guidance**
  - **https://covid-19.acgov.org/schools**
  - **COVID-19 School Guidance: Alameda County School Reopening Plans**
  - **Guidance for Camps and Education/Recreational Programs** (ACPHD)
  - Guidance and FAQ for Out-of-School-Time Camps and Youth Extracurricular Programs: English | Arabic | Chinese (Simplified) | Chinese (Traditional) | Khmer | Korean | Spanish | Tagalog | Vietnamese (ACPHD, 9/30/2020)
- **Infection prevention and control in pediatric ambulatory settings**
- **Infection Control: Standard Precautions for All Patient Care**

2.5.5 Security

Security will play an integral role in any event requiring activation of a plan due to a disaster. 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.

OA EOC Security Responsibility
• **The OA EOC Public Safety Branch and on-site security/law enforcement will oversee safe environments for children.**
• Safety activities will focus on the safe operation and functions of facilities and sites including mitigation and correction of physical hazards to children. Security activities will include site security, childcare area security, control of unaccompanied minors, traffic management, and perimeter/access control.
OA EOC Public Safety Branch shall:
• **Coordinate with Environmental Health officials for assessment of shelter facility/site sanitation and health risks to children (e.g., chipping paint, extreme heat).**
• Coordinate with appropriate OA EOC Branches or agencies (e.g., Construction/Engineering, Fire) to implement safety plans including safe operation of and, if necessary, evacuation from, children's play areas, sleeping areas, common areas (e.g., bathroom/showers, recreation areas), and unused areas.
OA EOC Logistics Branch
• Assessment and, if necessary, addition of lighting inside and outside the facility for safe movement of families and children.
• Review and correction of child-risk hazards (e.g., trailing cords, open power outlets, stairs, non-alarmed exit doors).

Site Security and Evacuations - HCFs and Shelters

• **Local jurisdiction law enforcement will provide security to facilities and sites.** If local resources are exceeded, Logistics at the OA EOC will request support from adjacent jurisdictions or the State.
○ State may request EMAC and/or Federal support if applicable. Private security companies may provide security.
• The Public Safety Branch will advise on-site security (e.g., local law enforcement) and site management of any known security risks to children at the facility or in the surrounding community.
• **For large HCFs and shelters, if resources are available, management will implement a roving volunteer patrol to provide greater visibility to staff of activities and, to shelter residents, increase the comfort level regarding the safety of their children in the facility.**
• A percentage of the evacuee population will be subject to judicial and/or legislative orders restricting their freedom of movement geographically or in proximity to specific individuals (e.g., sex offenders, people under court orders/on probation). Applicable codes, regulations, statues will be referenced and implemented for required response.
• **If a person required to report by law and seeks government provided transportation or arrives at a HCF or shelter and self-reports, then reception or staff will advise the HCC or designated site manager, who will consult with on-site security and/or law enforcement for required follow-up action.** ***Merge with bottom 4 rows***
• If an evacuating person does not self-report and is identified, site management will notify on-site security or law enforcement and the OA EOC Care and Shelter Branch to request further information, direction, or action.
• **Law enforcement will determine whether the person required to report will remain on general evacuation transportation and/or in the shelter or will be provided alternate transportation and/or a separate shelter**.
• If person required to report remains in the general population environment, law enforcement will coordinate with reception center or management and with on-site security as to security plan to be implemented and procedures to follow.

- If reception center, transportation, or shelter site also holds the person or people from which the person required must remain at a distance, alternate arrangements will be made.

Perimeter and Building Access Control
• On-site security will identify perimeter and access control for all areas including parking areas, loading/unloading access, ingress and egress routes, and all entrances/exits.
• On-site security will monitor children's inside play areas and outside green spaces for access points, secure entrances and exits, hazards, and visibility.
Traffic Management
• Public Safety will create and implement a traffic management plan in and around mass care sites, including appropriate safety barriers and personnel in areas where children may be moving or playing.
• At publicly accessed mass care sites (e.g., shelters, bulk distribution sites, mass feeding sites) law enforcement will:
• Disseminate information to the affected public regarding traffic management and appropriate movement of people while at the site (e.g., control of children).
• Address ingress and egress traffic management issues with consideration for safety of children.

HOSPITALS AND SECURITY

- Hospitals and other HCFs should include 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 the coordination of interface between the facility and outside law enforcement. Ideally, an individual with preexisting relationships with law enforcement on local and regional levels, including relevant entities (e.g., Federal Bureau of Investigation; Bureau of Alcohol, Tobacco, Firearms and Explosives), may fill this position. There will need to be a security presence in the Hospital Family Reunification Center (HFRC) and the Pediatric Safe Area (PSA).

Refer to Section 4.5 and the Alameda County EMS Website Link below for additional information.

RESOURCES FOR PARENTS/GUARDIANS/CARETAKERS OF AT RISK/VULNERABLE CHILDREN

- Emergency Medical Information Brochure- Information on the Emergency Medical Information Form and developing an Emergency Care Plan for your child.
- Emergency Medical Information Form (from American Academy of Pediatrics) a detailed medical form that includes all aspects of your child's care.
- Emergency Medical Information Card a shorter version of the form that can be carried by your child.
- Fact Sheet for developing an Emergency Care Plan for the Special Needs .

2.5.6 Special Needs

Given children in disasters have special needs including supervision, medical, food, and transportation, this Annex assumes specialized planning and response will occur in a disaster event as listed below.

FUNCTIONAL NEEDS

- **A percentage of the population impacted by an emergency incident or event will be people with disabilities or others with access and functional needs (PAFN)** including children who have medical conditions; who require assistance with activities of daily living; who have limited English proficiency or are non-English speaking; who have limited mobility, sensory impairment, or intellectual disabilities; or who are unaccompanied minors.
- **PAFN will include children from congregate settings** (e.g., licensed community care or health facilities) and who receive in-home care.

Children with Special Needs – Group Homes

- There are several pediatric group homes within the coalition service area that care for high risk vulnerable pediatric populations.
- These patients require 24/7 care, are primarily non-mobile and non-verbal.
- They depend on durable medical equipment and are vulnerable to infrastructure damage (i.e. loss of power, transportation, etc.).
- It is of utmost importance that these institutions maintain and exercise their internal disaster plans and remain connected with regional response planning.

Cultural/Religious/Non-English Speaking Considerations

- It is important to consider language barriers and varying cultural traditions that may affect how patients and their families respond in a disaster situation. This is especially true with children as their cognitive ability at certain ages may lead them to misinterpret what is happening to them and their families.
- **Refer to Section 3.10 and 3.12 for local resources.**

2.6.1 Triage

- **Triage is the process of determining the priority of patients' treatments by the severity of their condition or likelihood of recovery with and without treatment**.
  - This prioritizes patient treatment efficiently when resources are insufficient for all to be treated immediately, influencing the order and priority of emergency treatment, emergency transport, or transport destination for the patient.
- **Primary triage is done at the scene by first responders (i.e. Field/EMS triage).**
  - 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. Ideally, this would be facilitated by Pediatric Subject Medical Experts.
- **Patient reassessment occurs continuously throughout the medical care of the victims**.
  - For example, patients in the ED are triaged by their needs such as operating room access, radiologic imaging, admission, etc.
- **Patients are also re-triaged if secondary transport/transfer to another facility is needed** (e.g. higher level of care, decompression, evacuation, etc.)
- **To accommodate the initial stabilization and treatment the EMS system must have a triage system in place that will maximize the potential for pediatric patients being taken to a hospital that has the resources for adequate care.**
  - For example, children (≤ 14 Years of age) should be triaged preferentially to a pediatric-capable trauma center (e.g.- Children's). **Refer to recommended policies/plans below**

    - **MCI EMS Response Update from new 2020 Alameda County EMS Field Manual**
    - New York's Triage Algorithm https://www.nycremsco.org/wp-content/uploads/2018/02/2018-01-REMAC-Advisory-Modified-START-Triage.pdf
    - Rady Children's Hospital, San Diego; Pediatric Surge Plan 2019
    - Washington Peds Surge Annex Triage Algorithms
    - Interim Guidance: SARS-CoV-2 (COVID-19) and Field Trauma Triage Principles
- **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:

  - ***Doing the greatest good for the greatest number.***
  - ***Identify victims with the best chance of survival*** *for immediate intervention, focusing care on those with serious and critical injuries but who are most likely to survive.*
  - ***Identify victims at extremes of care by sorting those who are minimally injured*** *and those who are so severely injured that they will not survive.*

- *Immediate treatment is given only those victims that the procedure or intervention may make a difference in survival.*

ALAMEDA COUNTY EMS TRIAGE POLICY

- Refer to the EMS Triage Policy pediatric sections below:
  - **http://ems.acgov.org/ems-assets/docs/Clinical/Field%20Protocols/2020%20FM%20Updates/3%20ACEMS_FM_2020_MainBook.pdf**

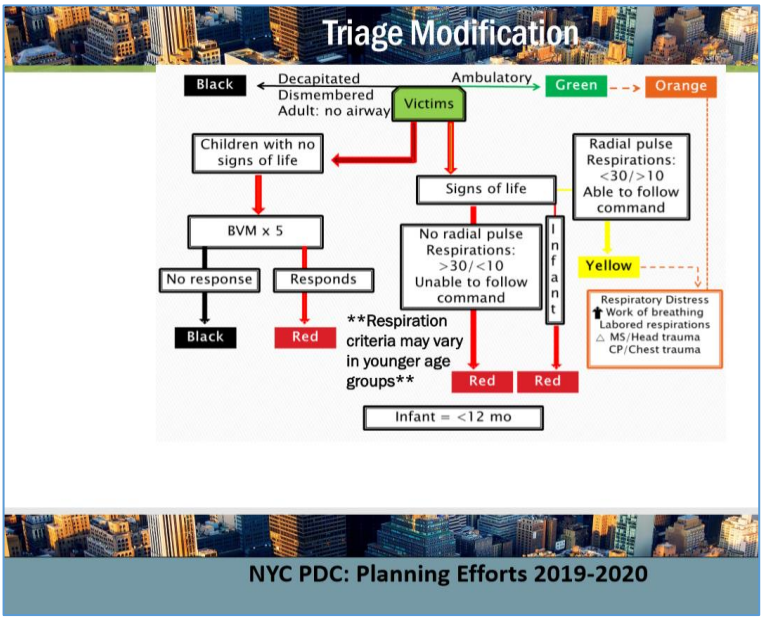
EMS MCI POLICY

COVID-19 Considerations

- *The SARS-CoV-2 virus (the virus that causes COVID-19) has spread widely throughout the globe and is still continuing to spread.* ***Emergency Medical Services (EMS) systems may experience a trauma-based mass casualty event -that necessitates triage while COVID-19 remains a significant threat to public health****.*
- *Several factors related to SARS-CoV-2 infection should be considered when planning for, or responding to, trauma and mass casualty events in which field triage principles or schema are applied.*
- *Appropriate use of Personal Protective Equipment (PPE), universal precautions, and other scene safety considerations must be in place at all times.*

2.6.1 Triage

- Alameda County is considering the New York Field Triage algorithm

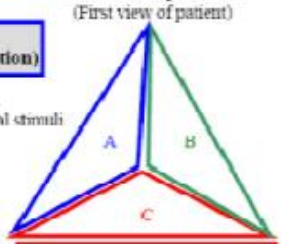


NEW YORK STATE'S EMERGENCY MEDICAL SERVICES
PEOPLE WHO CARE

PEDIATRIC ASSESSMENT

EMSC

General Impression
(First view of patient)



Airway & Appearance
(Open/Clear – Muscle Tone /Body Position)

Abnormal: Abnormal or absent cry or speech. Decreased response to parents or environmental stimuli. Floppy or rigid muscle tone or not moving.

Normal: Normal cry or speech. Responds to parents or to environmental stimuli such as lights, keys, or toys. Good muscle tone. Moves extremities well.

Work of Breathing
(Visible movement / Respiratory Effort)

Abnormal: Increased/excessive (nasal flaring, retractions or abdominal muscle use) or decreased/absent respiratory effort or noisy breathing.

Normal: Breathing appears regular without excessive respiratory muscle effort or audible respiratory sounds.

Circulation to Skin
(Color / Obvious Bleeding)

Abnormal: Cyanosis, mottling, paleness/pallor or obvious significant bleeding.
Normal: Color appears normal for racial group of child. No significant bleeding.

Decision/Action Points:

- **Any abnormal findings or life-threatening chief complaint** such as major trauma/burns, seizures, diabetes, asthma attack, airway obstruction, etc (urgent) – proceed to Initial Assessment. Contact ALS if ALS not already on scene/enroute.
- **All findings normal** (non-urgent) – proceed to Initial Assessment.

Initial Assessment
(Primary Survey)

Airway & Appearance
(Open/Clear – Mental Status)

Abnormal: Obstruction to airflow. Gurgling, stridor or noisy breathing. **V**erbal, **P**ain, **or U**nresponsive on AVPU scale.

Normal: Clear and maintainable. **A**lert on AVPU scale.

Breathing
(Effort / Sounds / Rate / Central Color)

Abnormal: Presence of retractions, nasal flaring, stridor, wheezes, grunting, gasping or gurgling. Respiratory rate outside normal range. Central cyanosis.

Normal: Easy, quiet respirations. Respiratory rate within normal range. No central cyanosis.

Circulation
(Pulse Rate & Strength / Extremity Color & Temperature / Capillary Refill / Blood Pressure)

Abnormal: Cyanosis, mottling, or pallor. Absent or weak peripheral or central pulses. Pulse or systolic BP outside normal range; Capillary refill > 2 sec with other abnormal findings.
Normal: Color normal. Capillary refill at palms, soles, forehead or central body ≤ 2 sec. Strong peripheral and central pulses with regular rhythm.

Decision/ Action Points:

- **Any abnormal finding (C, U, or P)**– Immediate transport with ALS. If ALS is not immediately available, meet ALS intercept enroute to hospital or proceed to hospital if closer. Open airway & provide O_2. Assist ventilations, start CPR, suction, or control bleeding as appropriate. Check for causes such as diabetes, poisoning, trauma, seizure, etc. Assist patient with prescribed bronchodilators or epinephrine auto-injector, if appropriate.
- **All findings on assessment of child normal** (S)– Continue assessment, detailed history & treatment at scene or enroute.

Normal Respiratory Rate:		Normal Pulse Rate:		Lower Limit of Normal Systolic BP:	
Infant (<1yr):	30- 60	Infant:	100-160	Infant:	>60 (or strong pulses)
Toddler (1-3yr):	24 -40	Toddler:	90-150	Toddler:	>70 (or strong pulses)
Preschooler(4-5yr):	22 -34	Preschooler:	80-140	Preschooler:	>75
School-age(6-12yr):	18 -30	School-age:	70-120	School-age:	>80
Adolescent(13-18yr):	12 -20	Adolescent:	60-100	Adolescent:	>90
		Pulses slower in sleeping child / athlete		Estimated min SBP >70 + (2 x age in yr)	

This reference card should not be considered to replace or supercede regional prehospital medical treatment protocols.

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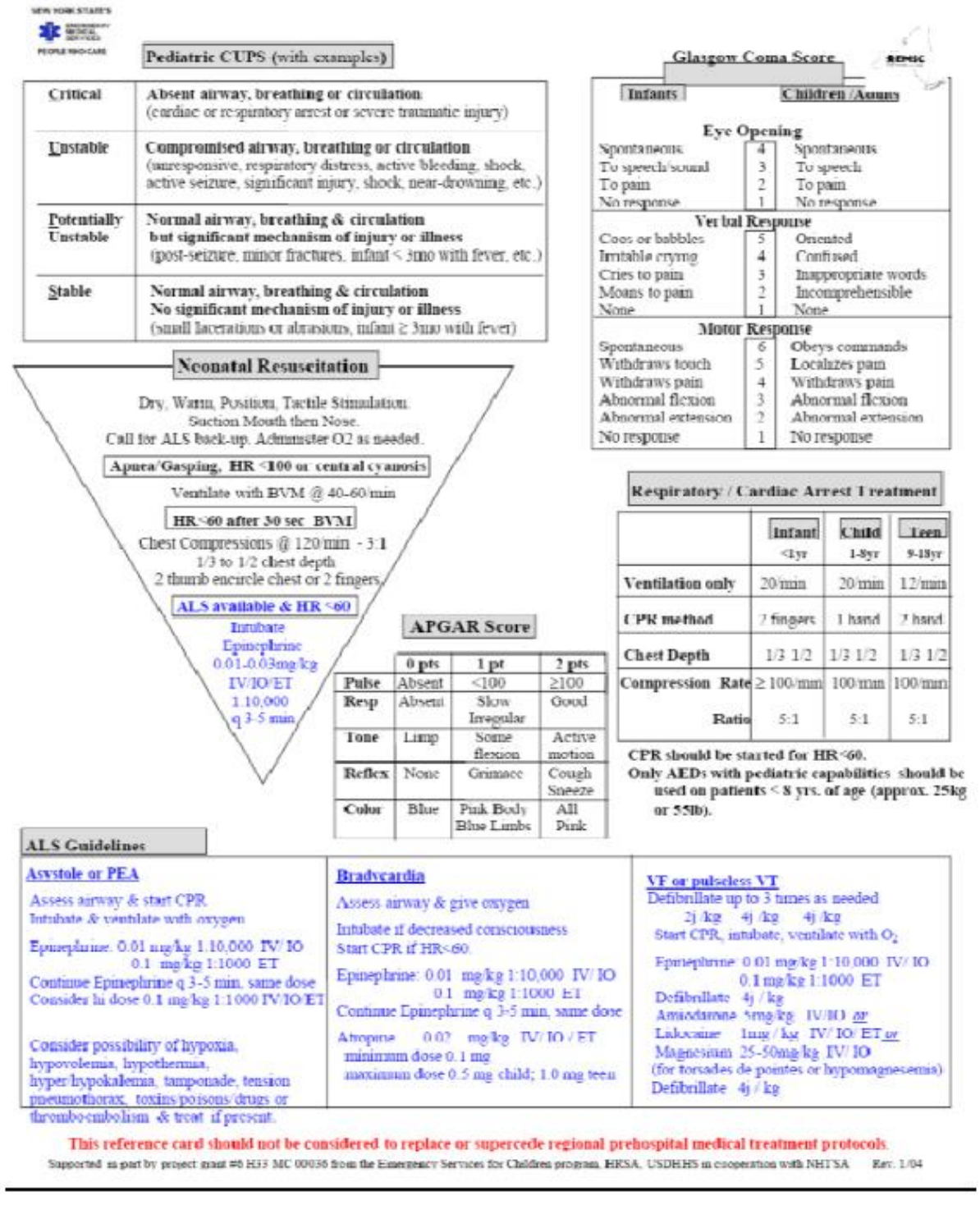

Pediatric CUPS (with examples)

Critical	**Absent airway, breathing or circulation** (cardiac or respiratory arrest or severe traumatic injury)
Unstable	**Compromised airway, breathing or circulation** (unresponsive, respiratory distress, active bleeding, shock, active seizure, significant injury, shock, near-drowning, etc.)
Potentially Unstable	**Normal airway, breathing & circulation but significant mechanism of injury or illness** (post-seizure, minor fractures, infant < 3mo with fever, etc.)
Stable	**Normal airway, breathing & circulation No significant mechanism of injury or illness** (small lacerations or abrasions, infant ≥ 3mo with fever)

Glasgow Coma Score

	Infants		Children /Adults
Eye Opening			
Spontaneous		4	Spontaneous
To speech/sound		3	To speech
To pain		2	To pain
No response		1	No response
Verbal Response			
Coos or babbles		5	Oriented
Irritable crying		4	Confused
Cries to pain		3	Inappropriate words
Moans to pain		2	Incomprehensible
None		1	None
Motor Response			
Spontaneous		6	Obeys commands
Withdraws touch		5	Localizes pain
Withdraws pain		4	Withdraws pain
Abnormal flexion		3	Abnormal flexion
Abnormal extension		2	Abnormal extension
No response		1	No response

Neonatal Resuscitation

Dry, Warm, Position, Tactile Stimulation.
Suction Mouth then Nose.
Call for ALS back-up. Administer O2 as needed.

Apnea/Gasping, HR <100 or central cyanosis

Ventilate with BVM @ 40-60/min

HR<60 after 30 sec BVM

Chest Compressions @ 120/min - 3:1
1/3 to 1/2 chest depth
2 thumb encircle chest or 2 fingers

ALS available & HR <60

Intubate
Epinephrine
0.01-0.03mg/kg
IV/IO/ET
1:10,000
q 3-5 min

Respiratory / Cardiac Arrest Treatment

	Infant <1yr	Child 1-8yr	Teen 9-18yr
Ventilation only	20/min	20/min	12/min
CPR method	2 fingers	1 hand	2 hand
Chest Depth	1/3 1/2	1/3 1/2	1/3 1/2
Compression Rate	≥ 100/min	100/min	100/min
Ratio	5:1	5:1	5:1

CPR should be started for HR<60.
Only AEDs with pediatric capabilities should be used on patients < 8 yrs. of age (approx. 25kg or 55lb).

APGAR Score

	0 pts	1 pt	2 pts
Pulse	Absent	<100	≥100
Resp	Absent	Slow Irregular	Good
Tone	Limp	Some flexion	Active motion
Reflex	None	Grimace	Cough Sneeze
Color	Blue	Pink Body Blue Limbs	All Pink

ALS Guidelines

Asystole or PEA

Assess airway & start CPR
Intubate & ventilate with oxygen

Epinephrine: 0.01 mg/kg 1:10,000 IV/IO
0.1 mg/kg 1:1000 ET
Continue Epinephrine q 3-5 min, same dose
Consider hi dose 0.1 mg/kg 1:1000 IV/IO/ET

Consider possibility of hypoxia, hypovolemia, hypothermia, hyper/hypokalemia, tamponade, tension pneumothorax, toxins/poisons/drugs or thrombo-embolism & treat if present.

Bradycardia

Assess airway & give oxygen
Intubate if decreased consciousness
Start CPR if HR<60

Epinephrine: 0.01 mg/kg 1:10,000 IV/IO
0.1 mg/kg 1:1000 ET
Continue Epinephrine q 3-5 min, same dose

Atropine 0.02 mg/kg IV/IO/ET
minimum dose 0.1 mg
maximum dose 0.5 mg child; 1.0 mg teen

VF or pulseless VT

Defibrillate up to 3 times as needed
2j /kg 4j /kg 4j /kg
Start CPR, intubate, ventilate with O_2

Epinephrine 0.01 mg/kg 1:10,000 IV/IO
0.1 mg/kg 1:1000 ET
Defibrillate 4j / kg
Amiodarone 5mg/kg IV/IO or
Lidocaine 1mg / kg IV/IO/ET or
Magnesium 25-50mg/kg IV/IO
(for torsades de pointes or hypomagnesemia)
Defibrillate 4j / kg

This reference card should not be considered to replace or supercede regional prehospital medical treatment protocols.

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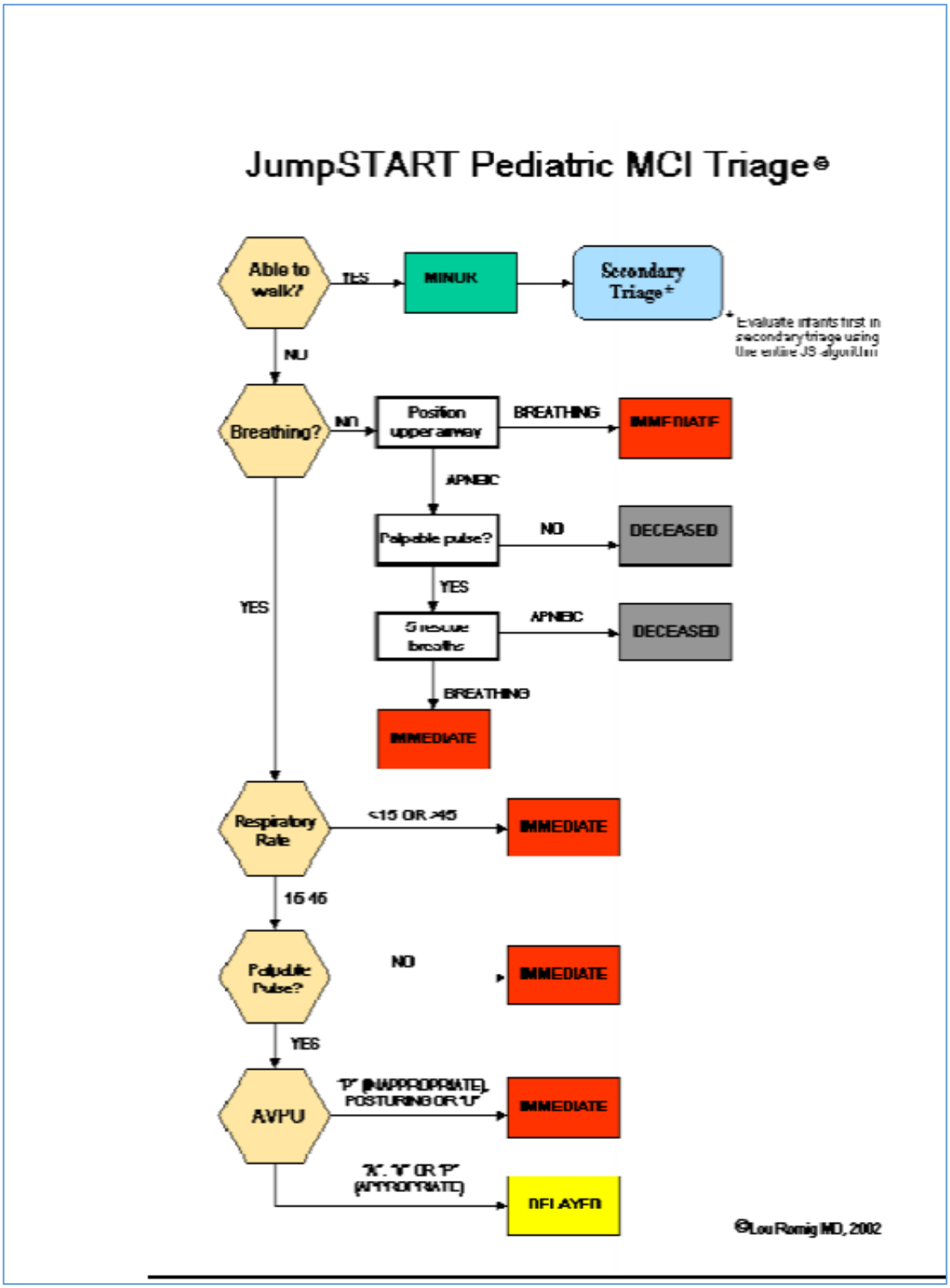
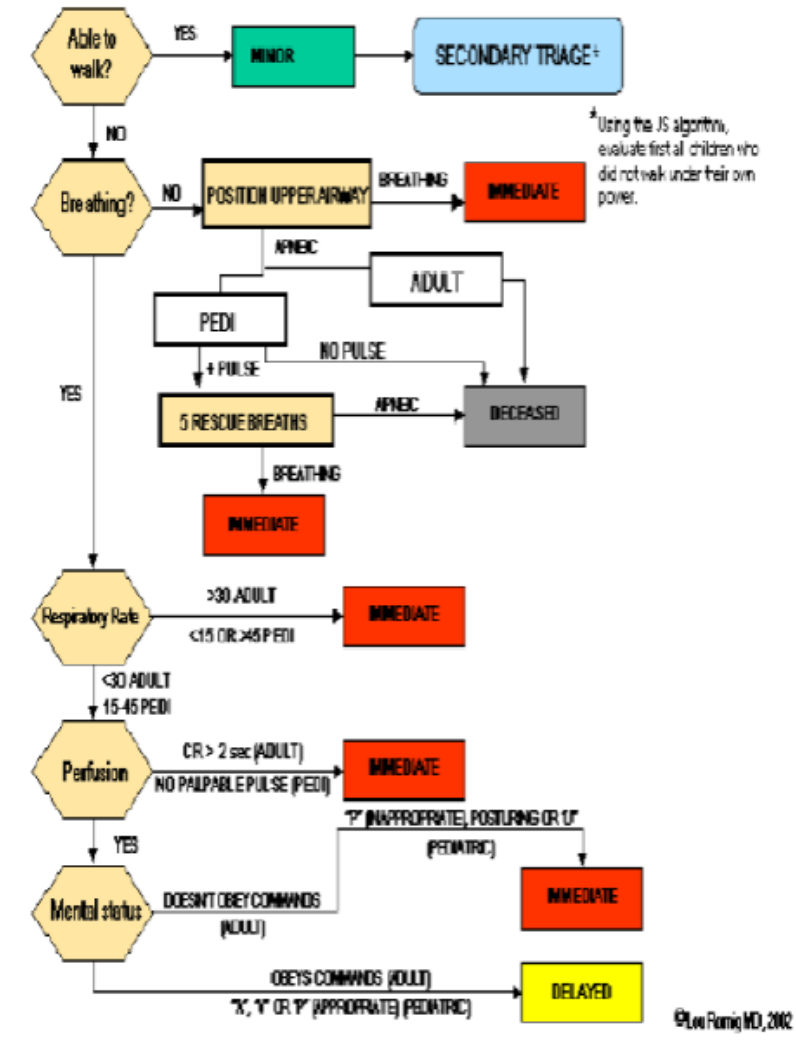

JumpSTART Pediatric MCI Triage©
Able to walk?
YES
MINUR
Secondary Triage+
+ Evaluate infants first in secondary triage using the entire JS algorithm
NO
Breathing?
NO
Position upper airway
BREATHING
IMMEDIATE
APNEIC
Palpable pulse?
NO
DECEASED
YES
YES
5 rescue breaths
APNEIC
DECEASED
BREATHING
IMMEDIATE
Respiratory Rate
<15 OR >45
IMMEDIATE
15 45
Palpable Pulse?
NO
IMMEDIATE
YES
AVPU
"P" (INAPPROPRIATE), POSTURING OR "U"
IMMEDIATE
"A", "V" OR "P" (APPROPRIATE)
DELAYED
©Lou Romig MD, 2002


Combined START/JumpSTART Triage Algorithm
Able to walk?
YES
MINOR
SECONDARY TRIAGE*
*Using the JS algorithm, evaluate first all children who did not walk under their own power.
NO
Breathing?
NO
POSITION UPPER AIRWAY
BREATHING
IMMEDIATE
APNEIC
ADULT
PEDI
NO PULSE
+ PULSE
YES
5 RESCUE BREATHS
APNEIC
DECEASED
BREATHING
IMMEDIATE
Respiratory Rate
>30 ADULT
<15 OR >45 PEDI
IMMEDIATE
<30 ADULT
15-45 PEDI
Perfusion
CR > 2 sec (ADULT)
NO PALPABLE PULSE (PEDI)
IMMEDIATE
"P" (INAPPROPRIATE), POSTURING OR "U"
(PEDIATRIC)
YES
Mental status
DOESN'T OBEY COMMANDS
(ADULT)
IMMEDIATE
OBEYS COMMANDS (ADULT)
"A", "V" OR "P" (APPROPRIATE) PEDIATRIC)
DELAYED
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2.6.2 Treatment/Medical Care

Pediatric Medical Care

- *Caring for children requires continued didactic and skills training especially for those who do not routinely care for children. Planning for children can be a daunting task.*
- **The Pediatric Readiness Program is promoted with all acute care receiving hospitals participating.**
  - Refer to Section 3.7
- **Alameda County EMS has pediatric policies and procedures identified in the EMS Field Manual 2020.**
  - Refer to the Alameda County EMS Field Manual **http://ems.acgov.org/ems-assets/docs/Clinical/Field%20Protocols/2020%20FM%20Updates/3%20ACEMS_FM_2020_MainBook.pdf**
- **The Alameda County EMS Field Manual and the Hospital Surge Templates provides a step-by-step instructions on how to prepare hospitals and care for children during a disaster.**
  - These resources provide information on pediatric triage, treatment, pharmacy, equipment, decontamination, security, behavioral health, infection control and neonatal preparedness and resuscitation, along with links to Just-In-Time training for basic pediatric skills.
  - **Refer to Sections 3.7 Alameda County Pediatric Readiness Resources and 4.1 for the Planning and Caring for Pediatric and Neonatal Patients in Disasters: Inpatient and Outpatient Guidelines, 2020**

2.7 Transportation

- *Pediatric transport at times requires specific equipment and always requires appropriately trained staff.*
- *Facilities will have in place proper procedures to transport pediatric patients safely to the appropriate facility.*
- *Evacuation of neonatal infants will require specialized modes of transport.*
- *In a large event when a regional and/or state JEOC has been activated, transport control will follow established procedures as outlined in the CA Patient Movement Plan and Alameda County EMS Plans.*

OA EMS and OA EOC Coordination

- **In a catastrophic surge event, the Alameda County EOP, EMS field policies, and MHOAC Manual are activated as applicable and scalable to the event.**
- The Incident Command on scene and/or Hospital Hospital Command Center (HCC) will communicate with the appropriate OA EOC Med/Health Branch to coordinate vehicle transport and patient destination.
- **Regarding a hospital evacuation, OA EOC Med/Health Branch may consider sending an ambulance strike team to triage patients and determine patient destinations at the impacted hospital.**
- In a hospital evacuation event, patients should be prioritized by the hospital Medical Triage Officer on scene who will be in communication with Incident Command and appropriate Hospital HCC and OA EOC Med/Health Branch.

Transport Options for Limited Transport Vehicles

- It is understood that there are limited EMS vehicles with pediatric capabilities, primarily due to lack of appropriately trained staff.

Therefore, it may be necessary to transport pediatric patients with staff from the referral institution in order to provide safe transport.

- Alternate means of transportation such as transit buses, facility shuttles and vans, ambulances, private vehicles etc. should also be considered and equipped with appropriate safety measures and staff when transporting children.

MCI and Triage Considerations

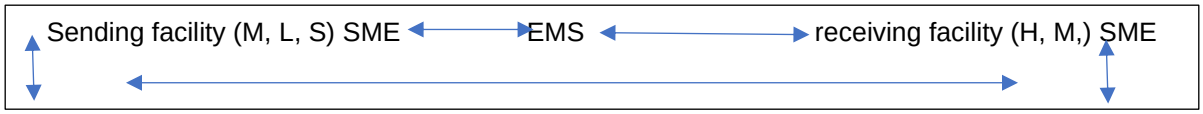
- In an out-of-hospital event, pediatric patients should be triaged and prioritized by established pediatric MCI triage algorithms to include JumpSTART or SALT.
  - **Refer to Section 3.3 for the Alameda County EMS Policies including the MCI policy.**

Patient Destination and Movement Decision Considerations

"Moving the Right Child, at the Right Time, to the Right Place"

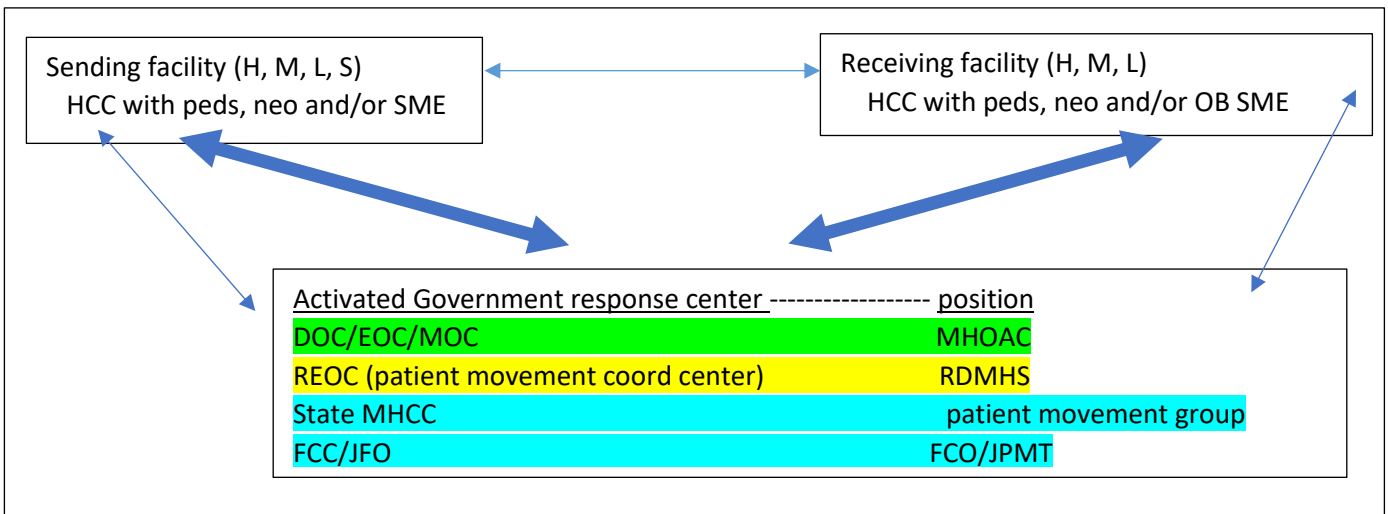
- **Once the CA Pediatric Surge Annex to patient Movement Plan 2020 is approved. Alameda County with adopt the transportation and patient movement essential components.**
  - Refer to the Diagrams below**.**
- **Hospital HCC will make any requests for resources through MHOAC Program - OA EOC Med/Health Branch**
  - Resource requests can include durable and non-durable medical goods, pharmaceuticals, bed availability and transport resources.
  - The MHOAC Program will attempt to fill the request using standard policy and procedures as outlined in the EOM and MHOAC Program Manuals.

1. Day-to-day movement of pediatric patients:Refer to CA Pediatric, Neonatal, and OB Surge Annex



- Facility resources are adequate to meet the need.
- Usually a transfer is from a M, L, or S facility to a higher level of care.
- **The appropriate SME is either pediatric, neonatal or OB (including PICU and NICU)**
- The authority to request a move rests with the SME at a sending facility.
- The authority to accept a patient belongs to the SME at the receiving facility.
- **The responsibility to arrange an appropriate level of EMS transport belongs to the SMEs.**
- Existing agreements may be used including catchment areas, transfer agreements, MOU, MOA, etc.
- A MHOAC may or may not be used as a resource or informed.

2. Pediatric patient movement with emergency system activation:



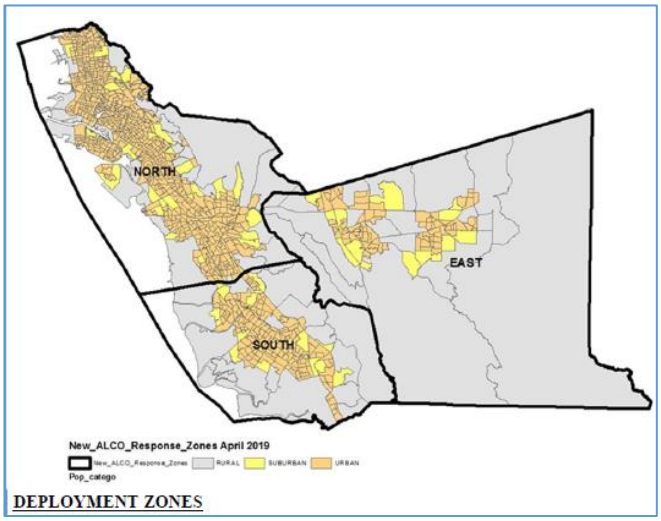
SECTION 2 – RESPONSE CONCEPT OF OPERATIONS

Key Elements

- **Aims to prioritize pediatric patients for transport to the most appropriate facility from the scene of an MCI**
  - Minimizes need for inter-facility transfer for seriously injured children
  - **Addresses inter-facility (secondary) transport -** Secondary transport assessed AFTER completion of primary transport - SMEs would support prioritizing patients for movement

Ambulance Transport 911 Pediatric Capability

- Alameda County is separated into five exclusive operating areas (EOAs) for the provision of 9-1-1 ambulance transport services. Within each EOA there is a contracted provider for 9-1-1 ambulance transport services.



Inter-facility transport (IFT)

- There are several facilities within te coalition that contract with their own hospital pediatric transport vehicles.
- The Alameda County permitted Inter-facility transport (IFT) providers are listed below with their capabilities:

PROVIDER - IFT BLS-CCT	Capability Pediatric Critical Care / NICU CCT	Capability Pediatric BLS	EMS Providers (BLS/CCT) Contracts directly with ALCO hospitals
Sutter-AMR	YES	YES	. NICU contract with Alta Bates
ROYAL AMBULANCE	YES	YES	NO
NORCAL AMBULANCE	YES	YES	NO
UNITED AMBULANCE	NO	YES	NO
FALCK AMBULANCE BLS	NO	YES	NO
FALCON CCT	YES	YES	NO
PROTRANSPORT-1	NO	YES	NO
ARCADIA AMBULANCE	NO	NO	NO
BAYMEDIC AMBULANCE	NO	YES	NO
WESTMED AMBULANCE	YES	YES	UCSF CHO-BENIOFF
SACRAMENTO VALLEY AMBULANCE	YES	YES	NO
LIFEwest	NO	YES	Kaiser

Patient Movement – Transfer Assumptions

- General suggested criteria for transfer from a higher-level facility to a medium or low-level facility, when necessary, are as follows, in order of first to transfer priority:
  - **Patient >14 years of age** and developmentally age appropriate, medically stable condition, no special equipment needs.
  - **Patient >12 years of age** and developmentally age appropriate, medically stable condition, no special equipment needs.
  - **Patient >10 years of age** and developmentally age appropriate, medically stable condition, no special equipment needs.
  - **Patient >8 years of age** and developmentally age appropriate, medically stable condition, no special equipment needs.
  - **Community level NICU** patient to **Intermediate NICU**.
  - **Regional NICU** patient to **Community level NICU**.
  - Patients with multiple medical issues or chronic medical conditions (e.g., cardiac, pulmonary, oncology, endocrine) will stay at a High-level facility.
  - **Patients requiring specialized pediatric equipment** or procedures or are medically unstable will stay at a High-level facility.

Any pediatric patient that requires a level of care outside the EMT/AEMT/paramedic scope-of-practice will be required to remain at the sending hospital (and under the care of the attending physician) until one of the following can be arranged:

- An R.N. staffed air ambulance can be arranged to transport the patient.
- An R.N. staffed ground Critical Care Transport (CCT) ambulance can be arranged to transport the patient.
- A transferring hospital R.N. can be assigned to assist the EMT/AEMT/paramedic in providing care for the patient in the ambulance during transport.

During a pediatric surge event, the clinical determination of which patients are suited for transfer, and the prioritization for those transfers to specialty centers, will be made by the sending physician(s) in consultation with the receiving physician(s). The LEMSAs and MHOAC Programs will provide operational support/assistance in obtaining transportation resources (including ambulance strike teams and alternate modes of transportation).

The general practice in Region II for any large-scale surge event that involves pediatric patients will be as follows:

- According to current LEMSA policies/protocols, pediatric patients (between the ages of 0-14 years, including unaccompanied minors), will be evaluated/ treated on-scene and initially transported to the nearest acute care hospital emergency department for further evaluation/treatment.
- **If a pediatric patient requires medical care that cannot be provided at the original receiving hospital, arrangements will be made, by the sending hospital, to transfer the patient to the most appropriate higher-level facility.**
- Pediatric patient interfacility transports will be accomplished by either ground ambulance or EMS aircraft, as available and appropriate.
- Individual Operational Areas (OAs) will maintain current contact lists of local agencies that may be able to provide alternate modes of transportation, such as non-emergency medical transportation, bus companies, para-transit

***** Module 2 – Surge TTX ****

SECONDARY TRANSFER ACTIONS – USING Pediatric Intensivist Response Team (PIRT) AND EEI
• **During secondary transport the transferring facility is responsible for collecting the patient related EEI data** and transmitting is to the transfer center and the receiving facility.
○ The receiving facility is responsible for the facility related EEI data and reporting it to the transfer center and sending facility.
○ The sending facility physician should share the patient related EEI with the accepting facility physician who will share the facility EEIs.
○ Transfer will take place if the patient care needs are matched by the facility available capabilities.
• **The transfer center will arrange for secondary transport** of all patients based on the patient EEIs including ambulatory status and equipment needs.
○ The facility EEI data will be shared with the transfer center and sending facility to match resources to needs. The transfer center will decide on the type of transport need based on the transmitted EEIs.
○ The transfer center will request permission for transfer to the appropriate level of care facility designated in the EEIs. **Refer to Section 3.4 and 3.15**
○ The transfer center will submit the patent EEIs to the receiving facility who will review the information and then provide answers and availability based on the facility EEIs.
○ If the receiving facility resources meets the needs of the patient, the sending physician will speak to the receiving physician, confirm the information and update transfer patient status and notify the transfer center to proceed. Once completed the transfer center will proceed with transport.
• **If there are limited transport capabilities due to magnitude of the disaster the transfer center will contact the Pediatric Intensivist Response Team (PIRT) physician on call via the OA EOC M/HB** to prioritize the patients based on their EEIs (clinical severity, subspecialty and equipment needs). – *Pending Further Planning Discussions*
○ Alameda County is considering using the Pediatric Intensivist Team PIRT which is currently in the planning stages **Refer to Section 3.6**
• **The OA EOC M/HB in coordination with transfer center will decide on the type of transport need based on the transmitted EEI and PIRT recommendations**.
○ The transfer center will submit the patent EEIs to the receiving hospital who will review the information and then provide answers and availability based on the facility EEIs.
○ If receiving hospital resources meets the needs of the patient, the sending physician will speak to the receiving physician, confirm the information and update transfer patient status and notify the transfer center to proceed.
○ Once completed the contracted Transfer Center with coordination with Alameda County EMS will proceed with the transport.
• **The collection of information should be done electronically preferably by email or web-based platform that is accessible to both facilities and the transfer center**.
○ Incorporating the EEIs into the platform in the future would be optimal.
○ For large scale events overall facility surge capacity based on the EEI facility information would allow for overall utilization of resources, however the challenge is to maintain current up to date situational awareness.
○ In the event of a power or computer system failure a paper back up system should be utilized.
○ If possible the patient's complete medical record should accompany them to the receiving facility.

SECTION 2 – RESPONSE CONCEPT OF OPERATIONS

2.8 TRACKING

- **The focus of this annex is to establish a standard process to identify, track, and reunify children and families and outline the roles and responsibilities of agencies involved in tracking and reunification activities.** ReddiNet may be used for data gathering for Patient Tracking (using the MCI and messaging Modules) and Family Reunification.

CA Tracking Plan Consideration - CUPTS
This plan will consider using the patient tracking system that is a part of the CA Patient Movement Plan:
• The **California Unified Patient Tracking System (CUPTS),** while still an untested concept and must be practiced, will provide a standard method of tracking patients in a large-scale surge event.
• This system will provide a uniform method of tracking both adult and pediatric patients.
The CUPTS consists of three (3) components:
• The County of Origin: Using the FIRESCOPE OA Code
• The Sex of the Patient: M, F, U
• The last four digits of the Triage Tag (or last four of the SSN if no tag)

2.9 Reunification

Reunification - HCFS

- Every health care facility will maintain internal procedures for family reunification.
- **Planning for a Pediatric Safe Area (PSA) is key to pediatric security and pediatric tracking during response.** If the event requires resources beyond what individual health care facilities can provide, then local, operational area, regional and/or federal Family Assistance Center plans will be activated and family reunification will follow designated procedures below.

ALAMEDA COUNTY AGENCIES AND DEPARTMENT REUNIFICATION ROLES
Alameda County Social Services Agency (SSA)
• *Lead agency supporting children affected by a disaster incident/event.*
• *Care and Shelter Branch Coordinator for the County's unincorporated areas of Ashland, Castro Valley, Cherryland, Fairview, San Lorenzo, and Sunol*
• *OA EOC Care and Shelter Branch Coordinator for mass care.* **Support children who become unaccompanied minors as a result of being separated from or lack a parent/guardian as a result of a disaster.**
• Coordinates care of unaccompanied minors in sheltering system which includes mobile teams with resources if shelter in place is needed for groups of unattended children in congregate care facilities (e.g., schools or child care programs)..
• Coordinates trained staff to support and is responsible for the following in mass care:
• Coordinates mass care activities with local Red Cross chapter or Red Cross Disaster Relief Operation (DRO) if activated.
• **Coordinates with Voluntary Agencies Active in Disaster (VOAD), local governmental agencies supporting mass care, NGO/CBOs supporting mass care, State agencies, and Federal personnel, when applicable.**
• Manages registration of evacuees or tracks children in shelter in place settings.
• **Responds to inquiries from people outside affected area who are seeking information regarding missing persons.**
• Provides funds or purchase orders for food, clothing, shelter, medical care, transportation, and other essential needs to support children, based on casework with individual persons.
• **Manages the CalFresh and Disaster CalFresh (D-CalFresh) programs (i.e., formerly "food stamps" and Federal regular and disaster Supplemental Nutrition Assistance Program [SNAP/D-SNAP]).**
• Manages, or provide assistance with, programs that support families with children including child care, Medi-Cal, housing assistance, and Supplemental Security Income.
• Develops memorandums or statements of understanding and collaborative planning efforts with support agencies and organizations such as the Red Cross, Voluntary Organizations Active in Disaster (VOAD), the Salvation Army, local community-based organizations, national response organizations, and child care providers.
Department of Children and Family Services (DCFS)
• Manages custody issues of unaccompanied minors.
• Coordinates physical reunification of unaccompanied minors with parents/guardians or other family separated as a result of the disaster.
• Manages follow-up on the welfare of children within the foster care system who have evacuated and/or whose foster homes have been affected by disaster.

Procedures for Care of Unaccompanied Minors will include the following:

- During or following a disaster, some minors may become unaccompanied from their families/guardians. Reunification of these minors is a priority.

REUNIFICATION AND MISSING CHILDREN

OA EOC Reunification Processes

Reunification Methods and Services

- **OA SSA shall assist in the reunification process by taking some or all of the following actions:**
  - Activate or request activation of all systems used for disaster welfare information and reunification (e.g., Red Cross Disaster Welfare and Reunification Systems - Safe and Well).
  - Coordinate through the OA EOC Care and Shelter Branch to request information from other OA Branches, Units, or agencies (e.g., coroner's office, Family Assistance Center (FAC), Search and Rescue, law enforcement) to support parents/guardians seeking missing children, people who have information about missing persons, or unaccompanied minors seeking missing parents/guardians.
  - Parents or guardians seeking custody of a child will have their identities and rights to the child verified prior to release of the child to their care.
  - If multiple persons seek custody of the child (e.g., divorced parents, relatives), verification of legal and physical custody will be sought prior to release of the child to either parent/guardian. If verification cannot be acquired from the affected area or the person seeking custody, the decision-making will be moved to a judicial process.
  - Transportation or access to a mode of transport will be provided for reunification of unaccompanied minors with parents or guardians via the OA EOC or local jurisdiction.

Procedures for Reunification of Unaccompanied Minors will include the following:

- If a verified parent, guardian, or extended family has not been located within a timeframe determined by SSA, DCFS will implement its standard operating procedures for placing the child into foster care.
- If a group of unaccompanied minors is under shelter care when a shelter is closing, the group will be moved to another shelter or a shelter supported by DCFS will be opened and staffed for their longer-term care until appropriate foster care can be located.
- Child care support groups, nonprofit organizations, and faith-based groups will be requested to provide care assistance until parents, guardians, or caregivers can be located or long-term arrangements can be made. Resources from these groups will be vetted through regular processes.

Support Unaccompanied Minors

Support for Unaccompanied Minors in Shelters
Information Regarding Missing Victims and Safe Locations
• Staff will obtain as much information as possible about the minor and his or her parents/guardian (e.g., names, phone number, and last known
• Unaccompanied minors will be tracked in official shelters for the purpose of family reunification. Independent shelters are encouraged to track unaccompanied minors as well.
• The child will be placed in a secure area, supervised, until DCFS, law enforcement, or a verified parent/guardian takes physical charge of the minor.
• Red Cross procedures for unaccompanied minors will be used until the minor is turned over to DCFS or their designate.
Parents/Guardians Seeking Missing Children
• **Parents/Guardians seeking children who are identified as deceased** will be informed in the presence of a mental health or behavioral health staff person, shelter management, and a representative from the coroner's office or law enforcement, as appropriate and available.
• Parents/Guardians will be assisted in claiming the remains and possessions, if any, of the victim using law enforcement, coroner's office, or other agency standard procedures, as appropriate.
Children Whose Parents/Guardians are Missing
• If parents/guardians of unaccompanied minors are identified as deceased, a mental health or behavioral health staff person, shelter management, and a representative from the coroner's office or law enforcement , as appropriate and available, will be present when the child is advised.
• DCFS will be advised as soon as possible.
• Reunification processes will proceed to identify an alternate guardian and/or extended family.
Confidentiality requirements
• Brief response personnel in requirements, protocols, procedures, and importance of confidentiality in managing information about children.
• Medical information will be managed based on HIPAA requirements, as needed.
Coordination of disaster welfare information from investigative and disaster support services sources will be managed by the Care and Shelter Branch with information from the following sources:
• Missing-persons records – law enforcement
• Coroner records – coroner's office
• Evacuee tracking systems – NGO/CBOs, governmental, private.
Welfare Information Services
The following resources can be used by the public to assist in obtaining information during and after a disaster.
Red Cross Safe and Well Website
• The Red Cross Safe and Well website provides a tool with which to exchange welfare information with loved ones and friends in the immediate aftermath of a disaster. The Red Cross also actively seeks out and coordinates welfare inquiries as they are received.
National Emergency Child Locator Center
• The National Emergency Child Locator Center is operated by the National Center for Missing and Exploited Children. During a disaster declared by the President, this system is used to assist in the reunification of families and locating children.
National Resource Center for Child Welfare Data and Technology
• The National Resource Center for Child Welfare Data and Technology created a web application called Reconnect Families designed to aid child welfare organizations, both public and private in locating and reconnecting the families they serve.
National Emergency Family Registry and Locator System
• The National Emergency Family Registry and Locator System is a web-based system that assists families separated by a disaster reunite.
Family Assistance Centers (FACs)
• FACs are used during mass casualty events as safe and secure locations for families of missing victims to wait for or receive information regarding their family member(s) (e.g., victim is deceased, has been admitted to a hospital, or is still missing). They are also places at which families may provide information to authorities in order to assist in identifying victims, receive updates regarding incident recovery, and receive emotional support, spiritual care, and health and social services as resources are available.
Family Reunification Requests
• Family Reunification Requests, which are requests to reunite family members who have been separated within the disaster area, are handled in the same way as Emergency Welfare Inquiries.

Tracking & Reunification

HOSPITALS – Displaced Children

- *Hospitals have historically served as safe havens for displaced persons during a disaster. Abandoned children are also often brought first to a hospital emergency department for evaluation.*
- *During a disaster, hospitals may again serve as safe havens and may find themselves host to displaced and unaccompanied children. As an example, Hurricane Katrina and the ensuing floods and chaos caused over 3,000 children to be displaced throughout the United States.*
- *These displaced children, if unaccompanied, are at increased risk for maltreatment, neglect, exploitation, and subsequent psychological trauma. Hospitals and medical clinics will need to be especially alert to the safety and mental health issues of these children.*

- Hospitals, especially those that do not routinely take care of the pediatric population, need to pay special attention to the specific security needs of this group and take the necessary precautions to ensure proper care of these individuals while they are in the hospital.

There are two populations of accompanied children during a disaster that should be addressed:

1. *The pediatric patient who is a patient of the hospital because of the disaster and who may become separated from the responsible adult; for example, if the responsible adult is also a patient.*
2. *The pediatric visitor who is not a patient of the hospital but who may be accompanying an adult person who is a patient; for example, a critical adult patient who was caring for a minor at the time of the disaster or event.*

- A possible solution to tracking these persons is to use a system of identification bands for the minors and corresponding responsible adults that are distributed as soon as these individuals contact the Emergency Department (ED) area.
- Care must be taken to quickly and correctly place bands or other identification devices on both parties. Create a safe area that will serve as a holding area for uninjured, displaced or released children awaiting adult caregivers.

Hospital Considerations for Displaced Children
Rapid identification and protection of displaced children (less than 18 years) is imperative to reduce the potential for maltreatment, neglect, exploitation, and emotional injury.
▪ A critical aspect of pediatric disaster response is effectively addressing the needs of children who have been displaced from their families and legal guardians.
○ The separation of children from significant others is a recognized factor influencing the psychological responses of children after a disaster.
▪ All hospitals, medical clinics, and shelters providing care to child survivors of disasters should immediately implement appropriate child-safety measures in direct response to this crisis.
○ Initiatives such as “Operation Child-ID” implemented in Camp Gruber Oklahoma after Hurricane Katrina in 2005
○ Find out where they are sleeping/being held and the name and age of person(s) who is/are supervising them.
• Parents/Caregivers have a key role in a child’s sense of safety and security. Helping them reconnect quickly is a high priority. Essential considerations are:
○ Gather all available identifying information to provide to the appropriate authorities. This should include:
○ Name - - Parent(s)’s name - - Caregiver’s name - - Sibling name(s)
○ Address - - School - - For younger children, and those unable to respond, notate other differentiating characteristics (birthmarks, hair color, eye color, etc.…)
➢ If an unaccompanied child is encountered, gather the above information and contact the appropriate authorities.
➢ Provide children with accurate, easy to understand information about who will be supervising them and what to expect next.

2.10 Deactivation And Recovery

Demobilization Indicators

- Throughout the Annex activation, the OA EOC Med/Health Branch, in consultation with applicable coalition partners, will determine the appropriate conditions to partially or fully demobilize and deactivate the Annex.
- Demobilization indicators may include:
  - The pediatric health care impact from the incident is at a low level sufficient for ending response coordination.
  - DPHC Partner agencies have deactivated any EOC/HCCs and/or emergency response plans.
  - The threat of a reoccurrence of the pediatric incident or similar events is sufficiently low to not require response coordination.

Demobilization Communications

- The OA EOC Med/Health Branch, in consultation with any applicable partners, will communicate deactivation of the Annex to the same partners that received the activation notice. Annex deactivation will likely be communicated by, at a minimum, email or ReddiNet messaging.
- Depending on the severity or scope of the incident, the NWHRN will lead and/or participate in an after-action process. If the OA EOC leads an after-action process, results will be communicated and distributed to partners following completion of the after-action report.

Recovery

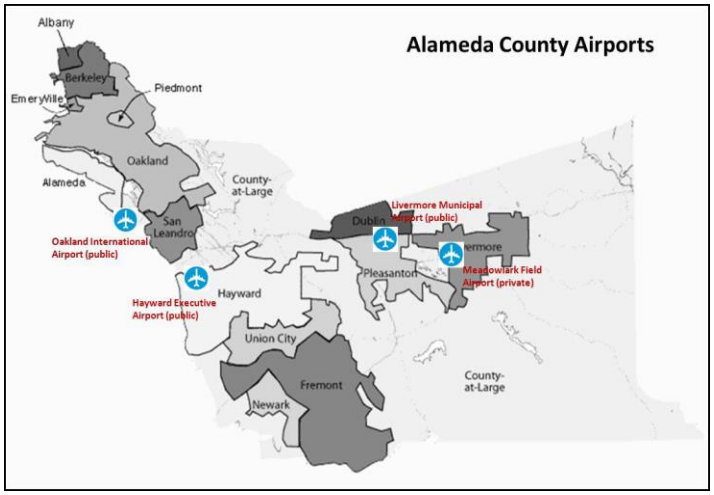
- After demobilization and during recovery the following activities should be completed:
  - Return of any borrowed assets (e.g. equipment, staff).
  - Debrief participating local, regional, and/or state partners with after action reports, discuss improvement plans, and create a coordinated approach to incorporating recommendations into future planning.
  - Communications concerning payment and reimbursement for the response.
  - Communication of any operational activities that need to be revised or continued

SECTION 3 – APPENDICES

3.1 RISK AND DEMOGRAPHICS

Fault Source	Fault Location	Total Length (miles)	Probability of Quake ≥ 6.7 2007–2036
San Andreas (north)	Marin, Santa Clara, Santa Cruz, San Mateo, and Sonoma counties	621	21%
Hayward/Rodgers Creek	Alameda, Contra Costa, Santa Clara, and Sonoma counties	27/19	31%
Calaveras (north and central)	Alameda, Contra Costa, and Santa Clara counties	37	7%
Concord/Green Valley	Contra Costa, Napa, and Solano counties	6/11	3%
Greenville Fault	Alameda, Contra Costa, Santa Clara counties	58	3%
San Gregorio (north)	San Mateo and Santa Cruz counties	54	6%
Mt. Diablo Thrust	Contra Costa County	8	1%

Source: U.S. Geological Survey, ñ Working Group on Earthquake Probabilities. *Forecasting California's Earthquake—What Can We Expect in the Next 30 Years? USGS Fact Sheet 2008–3027* at http://pubs.usgs.gov/fs/2008/3027; U.S. Geological Survey, USGS Working Group on Earthquake Probabilities. *The Uniform California Earthquake Rupture Forecast, Version 2—USGS Open-File Report 2007–1437* at http://pubs.usgs.gov/of/2007/1437/.



SECTION 3 – APPENDICES

3.1 RISK AND DEMOGRAPHICS

"The Haves and the Have Nots": A comparison of Pediatric Mass Casualty/Multiple-Casualty Policy in San Francisco and Alameda Counties

The World Health Organization (WHO) defines a mass casualty incident as an "event which generates more patients at one time than locally available resources can manage using routine procedures" or "any event resulting in a number of victims large enough to disrupt the normal course of emergency and health care services."[1] These events can arise from the hands of men or nature. Regardless of the culprit, both have risen since the 1970s, with natural disasters having increased. The WHO reported that in the "1970s, man-made events accounted for 16.5% of disasters and 4.3% of related deaths; in the 1990s, they had risen to 42% and 9.5% respectively (these figures do not include "complex emergencies" involving armed conflict and a total breakdown of authority)."[1] If we were to look at gun violence's role in mass fatalities, just in the last six years, we have seen a 55% increase in mass shootings, and though the year has not yet ended, the United States has already exceeded the number of mass killings in 2019 at 491 incidents.[2]

In light of these increases, it is more vital than ever for every local government and municipality to create a Mass Casualty Incident plan to prepare for these catastrophes. **California is unique because it has been a victim of MCIs from gun violence (7 of 31 mass murders were committed in California in 2019, the most of any other state), and massive wildfires that have ravaged its forests.**

Two of its counties, San Francisco and Alameda, are only 13 miles apart, but the counties could not be more different. San Francisco is home to the most billionaires per capita in the world.[3] While 15% of Oakland (of Alameda County) residents live below the poverty line, beyond the California and national averages.[4] However, this is not the biggest difference between the two cities. When we consider the pediatric population of both areas, there is a stark difference. San Francisco has the lowest percentage of children among any of the largest 100 cities in America, **while Oakland's (as well as its county, Alameda) percentage of children exceeds New York City's percentage of children**.[5]

The disparity in these two counties' populations is reflected in its EMS policies when it comes to Mass Casualty/Multi-Casualty Incidents (MCI). Alameda County EMS has a stand-alone, robust pediatric surge protocol (as an adjunct to the MCI policy), while San Francisco County EMS has only incorporated minimum pediatric protocols into its larger MCI policy.

We know from the American Academy of Pediatrics' (AAP) numerous publications, that children are one of the most vulnerable populations in MCI/Disaster events. Pediatric populations have unique physiology that varies with age and are oftentimes taken care of by those who are not familiar with pediatric care is only part of what worsens their care in these events. In Shirm et al, 72.9% of agencies report having written plan responses for MCI, while only 13% of agencies report having pediatric specific plans.[6] Though San Francisco County has approximately 120,000 children (the same number of dogs), its minority pediatric population has another layer of vulnerability.

3.2 SURGE STRATEGIES - 4S/3C PLANNING & CRISIS STANDARDS OF CARE

Hospital Pediatric Surge Readiness Requirements Adapted from Kaiser Permanente
The most important aspects of plans are as follows:
1. **Assurance that every medical center has a local disaster plan** and leaders who know how to access that plan. This plan includes a means of communication with the local counties and regional support teams. This should include triage systems including SALT, transfer systems including TRAIN and evacuation systems like EVAC 1,2,3.
2. **Baseline capacity:** A general idea of pediatric capacity and ability to take care of different complexity of care at baseline, on a non-disaster day, for medical centers. This will never be perfect but knowing who has PICUs, NICUs (and the level), Pedi Surge, ECMO capability, Pedi Burn, Pedi trauma and mixed Adult/Pedi capability is very important. The county EMS leaders generally has an idea of the capacity at the different medical centers in their county.
3. **A plan for communication, coordination, transfer/transport—**one that looks at many different possibilities for who is open, impacted, not open, etc. The most important thing here is knowing how these entities will communicate, and who will coordinate and facilitate that communication, with as much specificity of the need as possible. It's impossible to plan for every possible set of circumstances—but it is possible to plan general strategies, and then really drill down on the decision making and communication processes that work the best, with the appropriate agencies planning the role they should be playing. The plan ensures local command center to reach out to regional command centers who then help move patients from areas under surge to facilities with capacity for those patients. Any transport between states for PICUs or NICUs will involve direct communication between involved physicians. If we are moving multiple patients between facilities due to a disaster, our regional and state disaster leaders will be involved to help monitor capacity, remove barriers and assure our tracking tools are being used.
4. **Tracking and Reunification**- Having basic details which stay with the patient and also available on an Electronic Medical record is important. It is important to be able to track patients through transitions to other facilities or locations.
5. Strategies to increase surge capacity
1. Rapid discharge of patients
2. Transport of complicated and vulnerable patients early
3. Age guidelines to allow non-pediatric facilities/floors to care for older kids
4. Green zones
6. Early identification of resource needs:
1. Personnel
2. Supplies
3. Equipment
4. Medications

3.2 SURGE STRATEGIES - 3S/3C PLANNING & CRISIS STANDARDS OF CARE

3.2.1 Logistics

Medical Surge and Medical Surge Triggers

In a disaster, the number of patients presenting for care may cause a surge. Surge is determined by the number of patients a hospital can receive while maintaining usual standards of care. For each of the critical system components needed to respond to a medical surge incident, space, staff, and supplies, three measurements guide overall surge capacity at each of the tiered levels. An incident does not have to overwhelm assets in all of the categories to impact health care.

- **Conventional capacity** is the ability for hospitals to manage a surge while operating daily practices with little or no impact on the patients or facility.
- **Contingency capacity** affects hospital daily practices' ability to be consistent but has minimal impact on usual patient care. At this point, the demand for resources has not exceeded community resources.

Crisis Capacity may require adjustments in care not consistent with daily practices, but the standard of care is coherent within the setting of an emergency.

- **The best possible care is provided to patients under these circumstances.**
- Once contingency or crisis capacity is reached during a surge of pediatric patients, hospitals without pediatric resources will require greater assistance from regional, state, and federal partners.
    - **In a mass casualty incident, the resources to assist children will likely be scarce,** and staff inexperience with pediatric critical injury and illness will result in an inadequate surge capacity.
- **Each Regional Health Care Coalition should maintain knowledge of the total capacity for pediatric casualties and have a plan in place to be able to support an increase in pediatric surge capacity during an incident.**
- Strategies to increase surge capacity within the hospital should be consistent with and integrated within Regional Health Care Coalition operational guidelines.
- **All appropriate available space should be utilized.**
- Some areas to consider include the following:
    - Discharging inpatients and emergency department patients as soon as feasible and safe.
    - Converting outpatient procedure beds into inpatient beds.
    - Establishing a discharge holding area.
    - Using hallways or creating alternate treatment areas (e.g., ambulatory clinics, on-site fitness center, etc.)
    - Strategies to create pediatric emergency treatment capacity outside the hospital.
    - Initiate mutual agreements with other health care facilities, such as long-term pediatric care and rehabilitation facilities.
    - Utilize mobile clinics, hospital-based ambulances, faith-based facilities, fitness centers, and/or schools as alternate treatment areas.
    - Establish relationships with pediatric tertiary care centers.

3.2.2 Potential Medical Surge Response Strategies

Table-1 Potential Medical Surge Response Strategies

Table 1 below demonstrates how each stage of surge capacity could be managed as the number of pediatric patients increases.

	Conventional Capacity	Contingency Capacity	Crisis Capacity
Medical Surge Capacity Capability Tiers	***Tier 1***	***Tier 2*** ***Tier 3***	***Tier 4*** ***Tier 5*** ***Tier 6***
Supplies	request	Caches	Allocation of Scarce Medical Resources
Space	• Cancel elective procedures • Use in-place bed additions • Begin surge discharge	• Clear patients from preinduction and procedure areas • Fill all available beds Bed availability reporting (ReddiNet)	• Place patients in hallways or lobby areas • Activate Alternate Care Sites

Staffing	• Use all staff trained to care for pediatrics to provide care	• Request pediatric trained staff from
		  • regional hospitals
		  • Medical Reserve Corps (MRC)
		  - Mobile Medical Field Teams
		  - Ambulance Strike Teams
			• Nurse Registries
			  - DHV
			  - National Disaster Medical System (NDMS) Disaster Response
			  - Utilize staff not trained for pediatric care

Essentials Resources – Space, Staff, Supplies

- **Every hospital in Alameda County must be prepared to provide supportive care services to all patients regardless of age.**
- **This section of the plan aims to provide guidelines for health care providers to continue to provide treatment ethically to pediatric patients, when there may be a significant imbalance between the needs of the patients and the resources available to the health care provider.**

POTENTIAL MEDICAL SURGE RESPONSE STRATEGIES

Space Surge Strategy

Primary Goal: To maintain operations and increase the capacity to preserve life and patient safety and ensure appropriate health care delivery to the community.

SPACE[2]	
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	- 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 inpatient 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) • 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	• 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
• G.I. Lab • Recovery Room Outpatient Surgery or Physical Therapy • Other o Use non-traditional areas of the hospital for inpatients o Cafeterias o Conference Rooms o Parking Structures	• 22 CCR 70809(c): Patients shall not be housed in areas which have not been approved by CDPH for patient housing and have not been granted a fire clearance by the State Fire Marshal
• 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 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 R.N. Staffing Ratio Law, requires Governor's standby order for statutory suspension

POTENTIAL MEDICAL SURGE RESPONSE STRATEGIES

Staff Surge Strategy

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

STAFF[5]	

• Paramedics
• Retired health professionals with an active license
  ○ EMRs
  ○ EMTs
  ○ Medical Assistants
  ○ LVNs
  ○ CNAs
	○ Liability/licensing regulations
	○ State laws regarding malpractice coverage for granted a fire clearance by the State Fire Marshal volunteers

• Utilize families to render care under the direction of a health care provider	• Title 22 – Certified nursing assistant to render care
• Implement and/or develop just-in-time training for clinical staff commonly assigned to nondirect patient care positions	• None

POTENTIAL MEDICAL SURGE RESPONSE STRATEGIES

Supplies Surge Strategy

Primary Goal: Ensure adequate levels of supplies and equipment are available.

Region III Pediatric Surge Work Group identified the following three (3) areas to prioritize when developing strategies for the allocation of scarce supply and equipment resources:

- **Airway**
- **Breathing**

Circulation

The workgroup has identified the following categories of supplies and equipment that should be available for use in the emergency room 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

3.2.2 Crisis Standards of Care

WRAP-EM
Western Regional Alliance for Pediatric Emergency Management

AZ CA NV OR WA

Pediatric Crisis Standards of Care Template – COVID-19

Ethical Rational:

Utilize academy consultative report.

Definitions:

Crisis standards of care (CSC) refer to substantial changes in usual health care operations due to a pervasive or catastrophic disaster that necessitate rational utilization of scarce resources like space, personnel, and equipment to provide the best possible delivery of health care to the greatest number of patients. Pediatric specific CSC guidance may overlap with adult standards. Depending on the needs of the institution or jurisdiction, a pediatric specific document may be either independent or embedded within a more comprehensive general CSC document.

Triggers:

CSC may arise at any level of government or within regional or specific hospital or other health care settings based often on formally-declared emergencies or corresponding executive orders that change the legal and ethical landscapes to facilitate shifts in prevailing health care delivery.

Practical Considerations:

CSC should be considered only in circumstances when healthcare demands exceed capabilities (e.g., beds, equipment, or staffing) of a community or institution after all contingency level efforts have been implemented. These efforts may include expansion of facility capabilities beyond standard operations, lawful and permissive transfers of patients, supplementation of capabilities with alternative resources and alternative care sites, and flexing of standard legal guidelines. Implementation of CSC guidance routinely is within the scope and authority of a governmental agency or a Healthcare facility incident command system. Engagement of subject matter experts, healthcare providers, or EMS personel in the implementation process is appropriate and encouraged. Different CSC plans may coexist at multiple different levels (State, local or healthcare facility) and in different neighboring states, appropriately recognizing the variable resource constraints and specific procedures in each setting. Still, conceptual alignment of ethics rational, definitions, scope, triggers, and algorithms to the greatest extent possible is ideal, particularly in the context of resource-constrained tertiary pediatric capabilities.

Legal Considerations:

The National Academy of Medicine has specified a series of legal concerns underlying implementation of CSC that are relevant in any institution or community as espoused in its recent rapid expert consultation to ASPR re: COVID-19. These include concerns among health care workers and entities re: potential liability for key decisions impacting patients. General and specific liability protections for workers and entities are addressed in the Network for Public Health Law resource, Legal Liability Protections for Emergency Medical/Public Health Responses, and other online resources.

Scope:

CSC standards may be implemented on an institutional, regional or state levels at the discretion of the appropriate level HICS or EOC incident command.

Pediatric Specific Guidance:

CSC implementation should focus on optimizing the best possible health care delivery to the most patients by prioritizing resources as follows:

- Delivery of care in lower level settings and with minimal resources wherever possible (examples include keeping patients in ward settings rather than transferred to intensive care units, utilization of alternative oxygen support rather than ventilators, intentional delays in procedures, minimal necessary pharmaceuticals, or expanded nursing ratio care settings).

- Resource intensive care support and operative interventions to patients with appropriate consideration for anticipated short or long-term needs, and anticipated probability for long term recovery.

Practical implementation of these goals can be assisted with pre-determined guidelines for care delivery. Notwithstanding concerns over the potential for unintended disparate impacts of scoring systems among vulnerable populations, several models have been developed to implement CSC decisions in real-time. Many of these have not been validated well for children, but may be in place institutionally for adult patients, such as the SOFA score (see Appendix I). The most reliable of pediatric scores to assist with this process is the PELOD-2 (see Appendix I). Alternatively, each pediatric CSC plan may appropriately opt to define individual physiologic parameters as a guide (see Appendix II).

References:

1. Institute of Medicine 2012. Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response: Volume 1: Introduction and CSC Framework. Washington, DC: The National Academies Press. https://doi.org/10.17226/13351.
2. National Academies of Sciences, Engineering, and Medicine. 2020. *Rapid Expert Consultation on Crisis Standards of Care for the COVID-19 Pandemic (March 28, 2020)*. Washington, DC: The National Academies Press. https://doi.org/10.17226/25765.

Appendix

Contents

I. Scoring Systems

A. PELOD-2

Organ Dysfunctions and Variables[a]	Points by Severity Levels						
	0	1	2	3	4	5	6
Neurologic[b]							
Glasgow Coma Score	≥ 11	5–10			3–4		
Pupillary reaction	Both reactive					Both fixed	
Cardiovascular[c]							
Lactatemia (mmol/L)	< 5.0	5.0–10.9			≥ 11.0		
Mean arterial pressure (mm Hg)							
0 to < 1 mo	≥ 46		31–45	17–30			≤ 16
1–11 mo	≥ 55		39–54	26–38			≤ 24
12–23 mo	≥ 60		44–59	31–43			≤ 30
24–59 mo	≥ 62		46–61	32–44			≤ 31
60–143 mo	≥ 65		49–64	36–48			≤ 35
≥ 144 mo	≥ 67		52–66	38–51			≤ 37
Renal							
Creatinine (μmoL/L)							
0 to < 1 mo	≤ 69		≥ 70				
1–11 mo	≤ 22		≥ 23				
12–23 mo	≤ 34		≥ 35				
24–59 mo	≤ 50		≥ 51				
60–143 mo	≤ 58		≥ 59				
≥ 144 mo	≤ 92		≥ 93				
Respiratory[d]							
Pao_2 (mm Hg)/Fio_2	≥ 61		≤ 60				
$Paco_2$ (mm Hg)	≤ 58	59–94		≥ 95			
Invasive ventilation	No			Yes			
Hematologic							
WBC count (× 10³/L)	> 2		≤ 2				
Platelets (× 10³/L)	≥ 142	77–141	≤ 76				

All variables must be collected, but measurements can be done only if justified by the patient's clinical status. If a variable is not measured, it should be considered normal. If a variable is measured more than once in 24 hr, the worst value is used in calculating the score. Fio_2: fraction of inspired oxygen.
Neurologic dysfunction: Glasgow Coma Score: use the lowest value. If the patient is sedated, record the estimated Glasgow Coma Score before sedation. Assess only patients with known or suspected acute central nervous system disease. Pupillary reactions: nonreactive pupils must be > 3 mm. Do not assess after iatrogenic pupillary dilatation.
Cardiovascular dysfunction: Heart rate and mean arterial pressure: do not assess during crying or iatrogenic agitation.
Respiratory dysfunction: Pao_2: use arterial measurement only. Pao_2/Fio_2 ratio is considered normal in children with cyanotic heart disease. $Paco_2$ can be measured from arterial, capillary, or venous samples. Invasive ventilation: the use of mask ventilation is not considered invasive ventilation.
logit (mortality) = −6.61 + 0.47 × PELOD-2 score.
probability of death = 1/(1 + exp [−logit(mortality)])

CRITICAL CARE MEDICINE

Leteurtre, Stéphane; Duhamel, Alain; Salleron, Julia; Grandbastien, Bruno; Lacroix, Jacques; Leclerc, Francis; on behalf of the Groupe Francophone de Réanimation et d'Urgences Pédiatriques (GFRUP); Critical Care Medicine41(7):1761-1773, July 2013. doi: 10.1097/ CCM.0b013e31828a2bbd

3.3 Triage, Medical Care, Treatment Guidelines, and Decontamination

3.3.1 Decontamination 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)
- school aged children and adolescents (8-18 years)

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.**

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 bythe hospital and labeled.

3.3 Triage, Medical Care, Treatment Guidelines, and Decontamination

3.3.1 Decontamination Based on Child's Age

- **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 be 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.**

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.**

SECTION 3 – APPENDICES

3.4.1 Inter-Facility Transfer - EVACUATION FORMS

Patient Evacuation Transfer Form

Loma Linda PICU Form

General Preparedness

HICS 260-P – PATIENT EVACUATION TRACKING FORM

Triage Category:

1. DATE	2. UNIT	3. ATTENDING PHYSICIAN
4. PATIENT NAME	**5. MR #**	**6. BIRTH DATE**

7. DIAGNOSIS (ES)

Place Patient Label / Bar Code Here

8. RESPIRATORY SUPPORT

- ☐ Oxygen FiO2_____% Liter Flow _____L/minute
- ☐ CPAP/BiPAP Settings _____
- ☐ Ventilator Type _____
- ☐ Ventilator Settings _____
- ☐ Chest Tube(s) #_____
- ☐ Bag/Mask with Tubing Sent
- ☐ _____

9. FAMILY NOTIFIED

☐ YES ☐ NO CONTACT INFORMATION:

10. ACCOMPANYING EQUIPMENT/TUBES/LINES (CHECK THOSE THAT APPLY)

Bed Type	Lines / IV's	Equipment	Nutrition
☐ Hospital Bed/Crib	☐ Peripheral IV	☐ Cardiac Monitor	☐ NPO
☐ Gurney	☐ Arterial Line	☐ Pulse Oximetry (stand alone)	☐ Diet For Age
☐ Isolette/Warmer	☐ Peripherally Inserted Central Catheter (PICC)	IV Pumps	☐ Formula _____
☐ Wheelchair	☐ CVL: Type _____	☐ # Syringe_____	☐ NG/OG Feeding Tube
☐ Ambulatory	☐ IO Device	☐ # Volume Pump_____	☐ Gastrostomy
☐ _____	☐ _____	☐ Cranial Bolt/EVD	**Misc.**
	☐ _____	☐ Foley Catheter	☐ _____
		☐ _____	☐ _____

ISOLATION ☐ YES ☐ NO	TYPE
REASON	VITAL SIGNS: Temp HR RR B/P O2%

11. DEPARTING LOCATION		12. ARRIVING LOCATION	
ROOM#	TIME:	Facility:	TIME:
ID Band Confirmed: ☐ YES ☐ NO	By:	ID Band Confirmed: ☐ YES ☐ NO	By:
Medical Record Sent: ☐ YES ☐ NO		Accepting Physician:	
Patient Labels Sent: ☐ YES ☐ NO		Admission Location: ☐ PICU ☐ ER ☐ Ward ☐ Other _____	
Belongings: ☐ with Patient ☐ Left in Room ☐ None		Place Triage Category Sticker Here Upon Evacuation	
Valuables: ☐ with Patient ☐ Left in Safe ☐ None			
Medications: ☐ with Patient ☐ Left on Unit ☐ to Pharmacy			

13. TRANSFERRING TO ANOTHER FACILITY

TIME TO STAGING AREA	Time Referral Facility Contacted
DESTINATION:	ARRIVAL TIME TO RECEIVING FACILITY:
TRANSPORTATION: ☐ Ambulance Unit ☐ Helicopter ☐ Other:	
DEPARTURE TIME FROM Loma Linda University Children's Hospital	
13. FACILITY NAME: Loma Linda Children's Hospital	UNIT:

PURPOSE: Document details and account for patients transferred to another facility. **Bedside Nurse to Fill Out**
ORIGINATION: Medical Care Branch Director
COPIES: **#1**-Stays with Patient, **#2**-Patient Tracking Manager, **#3**-Departing Location **HICS 260-P**

3.3.1 Inter-Facility Transfer - EVACUATION FORM HICS 260e - Sutter

HICS 260e – Patient Evacuation Tracking Form (TRAIN)
Sutter Medical Center, Sacramento

1. Date		2. From		
3. Patient Name (or place patient label here)			6. Diagnosis	
4. DOB	5. Medical Record Number		7. Admitting Physician	
8. Family Notified ☐ YES ☐ NO NAME: _____ CONTACT INFORMATION: _____				
9. Method of trans	10. Special Needs (i.e. Fall Risk, NPO)	11. Accompanying Equipment (check those that apply)		
☐ Hospital Bed ☐ Gurney ☐ Wheelchair ☐ Ambulatory ☐ Other:		☐ IV Pump(s)- ☐ Oxygen ☐ Ventilator ☐ Chest Tube(s) ☐ Other:	☐ Isolette/Warmer ☐ Monitor ☐ A-Line/Swan ☐ Other: ☐ Other:	☐ Foley Catheter ☐ Intraosseous Device ☐ Other: ☐ Other: ☐ Other:
12. TRAIN Triage Category ☐ BLUE (Stable/Car/Non-EMS Transport/Discharge) ☐ GREEN (Stable/Low acuity/BLS /No Injury) ☐ YELLOW (Minimal acuity/ALS Care/May have injury) ☐ ORANGE (Moderate/Critical acuity/ALS Care) ☐ RED (Maximal/Critical acuity/ALS Care)				
12. Isolation ☐ YES ☐ NO TYPE: _____ REASON: _____				
13. Evacuating Clinical Location			14. Arriving Location	
ROOM # TIME			ROOM # TIME	
ID BAND CONFIRMED BY:		☐ YES ☐ NO	ID BAND CONFIRMED BY:	☐ YES ☐ NO
MEDICAL RECORD SENT		☐ YES ☐ NO	MEDICAL RECORD RECEIVED	☐ YES ☐ NO
BELONGINGS	☐ WITH PATIENT	☐ LEFT IN ROOM ☐ NONE	BELONGINGS RECEIVED	☐ YES ☐ NO
VALUABLES	☐ WITH PATIENT	☐ LEFT IN SAFE ☐ NONE	VALUABLES RECEIVED	☐ YES ☐ NO
MEDICATIONS	☐ WITH PATIENT	☐ LEFT ON UNIT ☐ PHARMACY	MEDICATIONS RECEIVED	☐ YES ☐ NO
PEDS / INFANTS			PEDS / INFANTS	
BAG/MASK WITH TUBING SENT		☐ YES ☐ NO	BAG/MASK /W TUBING RCVD	☐ YES ☐ NO
BULB SYRINGE SENT		☐ YES ☐ NO	BULB SYRINGE RECEIVED	☐ YES ☐ NO
15. Transferring to another Facility / Location				
TIME TO STAGING AREA		TIME DEPARTING TO RECEIVING FACILITY		
Destination				
TRANSPORTATION ☐ AMBULANCE. # AGENCY			☐ HELICOPTER	☐ OTHER
ID BAND CONFIRMED ☐ YES ☐ NO BY				
DEPARTURE TIME:				
16. Prepared by PRINT NAME: _____ SIGNATURE: _____ DATE/TIME: _____ FACILITY: _____				

3.4.2 TRAIN - EVACUATION MODEL

- Alameda County is adapting the TRAIN Model.

NICU TRAIN TOOL

Transport	*Car*	*BLS*	*ALS*	*CCT*	*Specialized*
Life Support	Stable	Stable	Minimal	Moderate	Maximal
Mobility	Car/Carseat	Wheelchair or Stretcher	Wheelchair or Stretcher	Stretcher	Incubator or Immobile
Nutrition	All PO	Intermittent Enteral	Continuous Enteral or Partial Parenteral	TPN Dependent	TPN Dependent
Pharmacy	PO Meds	IV Lock	IV Fluids	IV Drip x1	IV Drip ≥2

Life Support	**Minimal =**	Hood or Low Flow Cannula O2, chest tube, etc.
	Moderate =	CPAP/BiPAP/Hi-Flow, Conventional Ventilator, Peritoneal Dialysis, Externally paced, continuous nebulizer treatments, etc.
	Maximal =	Highly specialized equipt., e.g., Neonatal Ventilator, HFOV, ECMO, iNO, CVVH, Berlin Heart, wt ≤ 1.5 kg, etc.
Pharmacy	**IV Drip =**	Pharmacologic agents, not TPN, that cannot be discontinued for transport.
Mobility	**Car/Carseat =**	Able to ride in automobile with age-appropriate restraints.
	Stretcher =	Includes pediatric transport gurney with size-appropriate securement harness.
	Incubator =	Transport incubator with equipment for connecting to ambulance
	Immobile =	Unsafe to move without special equipment e.g., neurosurgical/bariatric

3.4.2 TRAIN - EVACUATION MODEL

PEDIATRIC TRAIN TOOL

Transport	Car (non-ambulance)	BLS (2 EMT Team)	ALS (1 EMT, 1 Paramedic)	CCT (EMTs/ Paramedics & RN)	Specialized (Staffed depending on need)
Life Support	Stable	Minimal	Minimal/Moderate	Moderate	Maximal
Mobility	Car seat/ Home Wheelchair	Wheelchair/Stretcher	Wheelchair/Stretcher	Stretcher	Incubator Transport/ Stretcher
Nutrition	All PO	Intermittent Enteral	Continuous Enteral or Partial Parenteral	TPN Dependent	TPN Dependent
Monitoring Level/ Stability	Routine Vitals	Routine Vitals + O2 sat; Moderately stable	Frequent Vitals + Cardiac Monitoring; Interventions possible	Continuous; Changing status; Interventions probable	Specialized OR requirements; Equipment or limited resources; High complexity
Pharmacy	PO Meds	IV Lock	IV Fluids – IV Drip without titration	Titrated IV Drip; TPN Dependent	IV Drip ≥2, type and monitoring requirement

Life Support	**Minimal =**	O2; Peripheral IV; Trach (non-vent and not requiring deep suction during transport)
	Moderate =	CPAP/BiPAP/Hi-Flow; Chest tube; Continuous Nebulizer; Stable home/long-term vent (requires transport with RT or RN to maintain ventilator support)
	Maximal =	Ventilator; ECMO; External Pacemaker; Highly Specialized Equipment
Pharmacy	**IV Drip =**	Pharmacological agents that cannot be discontinued for transport, agents that require active monitoring. IV drips that can be maintained safely at current rate versus those that need dose monitoring and possible titration en route to destination (i.e. vasopressors, insulin, etc.)
Mobility	**Car (non-ambulance) =**	Able to get in and out of non-ambulance car, van or bus; sit up; follow commands
	Wheelchair =	Some impairment related to mobility; unable to ambulate long distances
	Stretcher =	Unable to ambulate or contraindicated to current medical status/condition
	Immobile =	Unsafe to move without specialized equipment. Non-ambulatory bariatric patient; unstable cervical fracture (includes incubator)

3.4.2 TRAIN - EVACUATION MODEL

Proposed Alignment of Transport and Bed Level Selection

(Based on TRAIN.....)

This is a proposal to align the selection of appropriate Transport Resource with initial identification of the appropriate Bed Level

Bed Level	Transport Level				
	BLUE Car	GREEN BLS	YELLOW ALS	ORANGE CCT	RED Specialized
NICU Conventional	DC/Level I	N-Level I	N-Level II	N-Level III	N-Level IV
NICU Contingency/Crisis			N-Level I*	N-Level II*	N-Level III*
PICU Conventional	DC/Level I	P-Level I	P-Level II	P-Level III	P-Level IV
PICU Contingency/Crisis			P-Level I* Adult ICU*	P-Level II*	P-Level III*
OB Conventional		O-Level I	O-Level II	N/A	O-Level III or IV
OB Contingency/Crisis		O-Level I	O-Level II	N/A	O-Level III or IV

* With specific caveats to meet specific treatment needs
- Can provide necessary respiratory support
- Can meet nutritional needs
- Surgery and ECMO for Level 4 in Level 3
- Travel distance consideration versus family separation

DC = Discharge

3.5 DECOMPRESSION - TRANSFER COORDINATION Centers and EEIs

- Inter-Facility Transfer Options with EEIs

DECOMPRESSION OR EVACUATION PROCESS

[redacted] *Emergency Command Transfer Cente* [redacted]

DECOMPRESSION PROCESS	NOTIFICATION TO [redacted] FEDERAL/STATE/COUNTY AGENCY OR SENDING FACILITY	PROVIDE BELOW INFORMATION TO EMERGENCY COMMAND TRANSFER CENTER [redacted]	TRANSPORT ARRANGEMENTS
Decompression *Generally a planned movement of patients when a Facility does not have the physical resources or staffing to care for the patients in their facility*	[redacted] ■ Ask for the On-duty supervisor ■ Advise of your facilities need to decompress. ■ If part of system, specify ▷ Keep pts. in-system only ▷ Both, system and next closest available. ■ Contact information ▷ Name & Title ▷ Phone number ▷ E-mail ■ Command Center # if in operation.	■ Patient Census report – includes all patients that need to be moved ▷ Patient Name ▷ DOB / Gender ▷ Current Room # & Unit Type (ED/TELE/ICU) ▷ Synopsis of patient and their needs ▶ Primary diagnosis ▶ Airway status and adjuncts needed ▶ Running infusions/Equipment ▶ Patient Weight (specify #'s or Kg's) ▶ Specialist type treating patient ▶ Isolation Precautions	[redacted] will coordinate with County Agency and Strike Team Leaders Equipment & Medication with the physicians orders determine the level of transport ■ RW (Helicopter) ■ FW (Airplane) ■ CCT (Nurse) ■ ALS (Paramedic) ■ BLS (EMT) ■ Mass Transit Vehicle

Essential Elements of Information for the Secondary Transport of Pediatric Patients	
The collection of patient related EEIs are the responsibility of the sending facility. The data should be shared with transfer center, receiving facility and physician. For a full description of the collection and reporting of the pediatric EEIs refer to the Utilization Guidance for the Collection and Reporting of the Pediatric Essential Elements of Information for Secondary Transport.	
Patient Related EEIs	
NAME *(If unknown use assigned numbers, color code, etc.)*	
AGE	Neonate (<1 month)
If chronologic age is not known select one estimate	Infant (0 - 1 year)
	Toddler (1 - 3 years)
	Pre School (3 - 5 years)
	Middle Childhood (6 - 11 years)
	Adolescent (12 - 18 years)
WEIGHT	Please note if wt ≤ 1.5 kg will need specialized transport
IDENTIFYING MARKS	
PICTURE (If available)	
e-FINDS Label	
RACE	White, Hispanic, Latino, Spanish, Asian, Asian Indian
	American Indian, Alaska Native, Black, African American
	Native Hawaiian, Other

Specialized Equipmen	ECMO
Patients in this category w	Neonatal Ventilator
transport services includin	Inhaled Nitrous Oxygen (iNO),
	High Frequency Oscillating Ventilator
	Berlin Heart (Ventricular Assist Device)
	Continuous Veno-Venous Hemofiltration
	Incubator
Ambulation Capability	Ambulatory: (TALS Level 3)
**Refer to TALS reference,*	Wheelchair: (TALS Level 2)
	Stretcher/Ambulance: Non-Ambulatory (TALS Level 1)
Transportation Need	Car/Bus/Van (For well infants and ambulating children utilize car seat)
Depending on ambulation	Ambulette
select the appropriate tran	BLS
as needed. This should be	ALS
center to ensure selection	Specialized pediatric providers on ambulance (refer to TRAIN resource)

Parental consent for treatment	
Accompanying Family Member	*State relationship to patient*
Primary diagnosis	
Co-morbidities	
Chronic Conditions	
Current Medications	
Vital Signs	Blood pressure, pulse, respirations, temperature
Glasgow Coma Scale	3-15, 15 best response, Comatose 8 or less, totally unresponsive 3
O_2 Saturation	
ETCO2	
Pupils	fixed and dilated, unequal, equal and reactive
Critical Imaging Findings	
Critical Lab Findings	
Trauma	***See appendix A for detailed injury categories and the need for care in a trauma center*
Burns	Type (thermal, chemical, electrical)
	Depth (superficial, superficial partial thickness, deep partial thickness, full thickness)
	Body location (Refer to burn chart reference in Appendix A)
	If chest or extremity, circumferential? (potential for compartment syndrome/need for escharotomy)

Subspecialty Need	Pediatric orthopedics
	Pediatric vascular surgery
	Pediatric trauma surgery
	Pediatric general surgery
	Burns
	Pediatric ophthalmology
	Pediatric mental health psychiatry
	Pediatric cardiothoracic Surgery
	Pediatric neurology
	Pediatric neurosurgery
	Pediatric ENT
	Re-Implant *(Please advise if body part available, Properly maintained)*
	Other (specify)
Current Location	Trauma Center, (General Level 1, Level 2, Pediatric Level 1 Level 2)
	Burn Center
	General Emergency Dept
	Adult/Pediatric ED
	Dedicated Pediatric ED
	Non-Pediatric Hospital
	Pediatric Ambulance Destination (Tier 1, Tier 2 Pediatric Hospital)
	Neonatal Unit Level 1-4
	Newborn
	PICU
	NICU
	PICU Vent
	Peds Med/Surgery/Telemetry
	Physical Rehab Peds
	Psychiatry Peds
Current Interventions	*This section details interventions that impact clinical, treatment and transport need*
	Intravenous line (peripheral, central)
	oxygen (mask, cannula, hood),
	CPAP (continuous airway pressure machine) - Do not require intubation
	BiPAP (Bilevel Positive Pressure Airway Machine - Do not require intubation
	Ventilator
	Chest Tube
	Peritoneal Dialysis
	External pacing
	Continuous nebulizer treatments
	Incubator

3.6 SMEs- Pediatric Intensivist PIRT/MPERT/DHV/MRC

Pediatric SUBJECT MATTER EXPERTS (SME) Definitions

There are three types of Pediatric Care Medical Specialists. and SMEs

- **Group 1 Specialists:**
  - Includes pediatric intensivists, pediatric emergency physicians and/or pediatric physicians with transport expertise who will be called upon during all events in which the Annex is activated to assist with patient triage, coordination of transfers and system decompression.
- **Group 2 Specialists**:
  - Includes pediatric specialty physicians, primary care physicians and neonatal subspecialists who will be activated to serve in a medical consultation role based on the specific needs of the event and the affected population.
- **Group 3 Specialists**:
  - Includes pediatric specialty advanced practice providers (e.g., nurse practitioners) and support resources (e.g., child life specialists, pediatric pharmacists) that will be activated to serve in a consultation role based on the specific needs of the event and the affected population.

OA EOC Subject Matter Experts

- Children's Annex Coordination, Technical Specialists, Liaisons, and Subject Matter Experts (SMEs)
- A Children's Focused Liaison and/or SME designated by the Operations Chief may work with SSA under the Mass Care Operations Branch or if needed and feasible, the Children's Liaison and/or SME may function within the EOC Medical / Health Branch. The SME may also be appointed as a liaison to the Director of Emergency Services at the EOC.
- To facilitate coordination within the OA EOC and the local jurisdiction operations in support of the emergency response for children, Shelter, Plans, Medical, and Logistics branches may designate children's technical specialists and subject matter experts.
- The Children's liaison, children's technical specialists and specific subject matter experts will conform to the ICS reporting structure assigned at the OA EOC as directed.
- These specialists may be convened by the Operations Chief serving as liaison or working within the Shelter or Medical branch to contribute to the OA Incident Action Plan.
- The Children's Liaison and SME may act as County liaison with NGO/CBOs supporting children.
- Within the ICS planning intelligence section, a designee may be responsible for collecting, evaluating, and disseminating operational information related to children.

MPIRT/MPERT/MRC/DHV TEAMS

- Alameda County is utilizing clinical pediatric intensivists and physicians identified in the Alameda County Unit DHV and MRC in the COVID-19 response.
- Given the HPP LEMSA and EMSC Coordinator is also the DHV Administrator, clinicians with pediatric capability can be accessed when needed for subject matter expertise remotely and for deployments.
- The concept of a Mobile Pediatric Emergency Response Team (MPERT) will be activated if needed.
- The Mobile Pediatric Intensivist Response Team (MPIRT) will be activated for secondary transport decisions if needed. **Refer to p; 60 – "SECONDARY TRANSFER ACTIONS – USING PIRT AND EEIs"**

3.7 Pediatric Readiness Project / EMSC

National PRP
Pediatric Readiness Project
Ensuring Emergency Care for All Children

Checklist and Available Resources

July 20, 2020

The National Pediatric Readiness Project is a multi-phase quality improvement initiative to ensure that all U.S. emergency departments have the essential guidelines and resources in place to provide effective emergency care to children. In late 2019, the National Pediatric Readiness Project Steering Committee underwent an extensive revision of the assessment, checklist and accompanying Readiness Toolkit in order to align with the 2018 joint policy statement "Pediatric Readiness in the Emergency Department," which can be accessed online at: https://pediatrics.aappublications.org/content/pediatrics/142/5/e20182459.full.pdf

The updated checklist—which was reviewed and endorsed by the boards of the American Academy of Pediatrics (AAP), the American College of Emergency Physicians (ACEP) and the Emergency Nurses Association (ENA)—is intended to be a concise enough to be printed and used by a hospital care team to take inventory of the emergency department. The checklist is supported by a comprehensive online Readiness Toolkit that mirrors of the structure of the checklist and offers additional resources.

In an effort to connect the checklist with the most relevant resources found in the Readiness Tooklit, the EMSC Innovation and Improvement Center together with the two Pediatric Disaster Care Centers of Excellence—the Western Regional Alliance for Pediatric Emergency Management (WRAP-EM) and the Eastern Great Lakes Pediatric Consortium for Disaster Response (EGLPCDR) developed the following document for use by hospital emergency departments.

WRAP-EM
Western Regional Alliance for Pediatric Emergency Management
AZ CA NV OR WA

EMSC | IIC
Emergency Medical Services for Children | Innovation & Improvement Center

3.7 Pediatric Readiness Project / EMSC

Pediatric Readiness Checklist

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 this joint policy statement.

Administration and Coordination of the ED for the Care of Children	
☐Physician Coordinator for Pediatric Emergency Care (PECC)*	https://emscimprovement center/domains/hospital-based-care/pediatric-readiness-project/readiness-toolkit/ https://emscproduction-NPRP Checklist Importance of the Pediatric Care Coordinator
• Board certified/eligible in EM or PEM (preferred but not required for resource limited hospitals)	Role Responsibilities of an MD ED Coordinator
• 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.	Is Your ED Ready for Children
☐Nurse Coordinator for Pediatric Emergency Care (PECC)*	Role Responsibilities of a Nursing ED Coordinator
• CPEN/CEN (*preferred*)	https://bcen.org/cen/ https://bcen.org/cpen/
• Other credentials (e.g. CPN, CCRN)	https://www.aacn.org/certification/get-certified/ccrn-peds
**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:	Nursing -Equipment Competency Validation Record Orientation Knowledge and Skills Checklist for the RN
• Assessment and treatment (e.g. triage)	Physical Assessment Pediatric Checklist

3.7 Pediatric Readiness Project / EMSC

Pediatric Readiness Checklist

	Behavioral Health
☐ Physical or chemical restraint of patients	Physical or Chemical Restraint of Patients
☐ Child maltreatment reporting and assessment	Child Maltreatment
☐ Death of the child in the ED	Death of the Child in the ED Death of a Child Template
☐ Do not resuscitate (DNR) orders	Do Not Resuscitate Orders
☐ Children with special health care needs	Children with Special Healthcare Needs
☐ Family and guardian presence during all aspects of emergency care, including resuscitation	Family-Centered Care Family Presence
☐ Patient, family, guardian, and caregiver education	
☐ Discharge planning and instruction	Discharge Planning
☐ Bereavement counseling	Bereavement
☐ Communication with the patient s medical home or primary care provider as needed.	Communication with Primary Care Providers
☐ Telehealth and telecommunications	Telehealth and Telecommunications

All-Hazard Disaster Preparedness	
The written all-hazard disaster-preparedness plan addresses pediatric-specific needs within the core domains including:	Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Preparedness Policies Family Resources
☐ 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	Location for Family Reunification Checklist for Locating Famies
☐ Tracking and reunification for children and	Tracking Children

3.7 Pediatric Readiness Project / EMSC

Pediatric Readiness Checklist

• Medication administration	
• Device/equipment safety	Equipment Competency Validation Record
• Critical procedures	Clinical Pathways
• 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	Check Your Pediatric Preparedness Example QI Plan: Illinois EMSC Pediatric Mile Traumatic Head Injury Quality Improvement Resources
• Data are collected and analyzed	HCA Pediatric Readiness Gap Analysis (Example)
• System changes are implemented based on performance	Rapid-Cycle Improvement Controlling Change
• System performance is monitored over time	Pediatric Readiness Data: An Opportunity to Improve Quality of Care in Your ED
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	Illness and Injury Triage
☐ Pediatric patient assessment and reassessment	Pediatric Assessment and Reassessment
☐ Identification and notification of the responsible provider of abnormal pediatric vital signs	Documentation of Vital Signs
☐ Immunization assessment and management of the under- immunized patient	Immunization Assessment
☐ Sedation and analgesia, for procedures including medical imaging	Sedation and Analgesia
☐ Consent, including when parent or legal guardian is not immediately available	Consent Consent Template
☐ Social and behavioral health issues	Social and Mental Health Issues

3.7 Pediatric Readiness Project / EMSC

Pediatric Readiness Checklist

families	Family Sign In and Tracking Form Unaccompanied Minor Tracking Form
☐ Access to specific behavioral health therapies, and social services for children	
☐ Disaster drills include a pediatric mass casualty incident at least every two years	Disaster Planning: Preparing for Pediatric Surges
☐ 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	PECARN Publications TREKK AHA Pediatric Resuscitation AHA Neonatal Resuscitation

Inter-facility Transfers	
☐ Written pediatric inter-facility transfer agreements	Interfacility Transfer Tool
☐ Written pediatric inter-facility transfer guidelines. These may include:	Interfacility Template Interfacility Transfer Toolkit
• 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	EBroselow System
☐ Weights are recorded in kilograms only	

3.7 Pediatric Readiness Project / EMSC

Pediatric Readiness Checklist

☐ For children who require emergency stabilization, a standard method for estimating weight in kilogramsis used (e.g., a length-based system)	Pediatric Resuscitation and Emergency Medications - Excel Calculator
☐ Infants and children have a full set of vital signs recorded	Quick Reference Code Cards
• 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.	Vital Sign Assessment
☐ CO2 monitoring for children of all ages	
☐ Process for safe medication delivery that includes:	Key Points on Medication Errors
• Prescribing	
• Administration	
• Disposal	
☐ Pre-calcuated 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.	2020 ED Checklist
☐ ED staff is educated on the location of all items	

Pediatric Readiness Checklist

☐ 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 (eg, 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 MX 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/m 1M and 0.1 mg/m IV solutions)	
☐ Furosemide	
☐ Glucagon	
☐ Insulin	
☐ Magnesium sulfate	
☐ Intracranial hypertension medications	

Pediatric Readiness Checklist

(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	
☐ 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	
☐ Actated 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 CO2 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	

Pediatric Readiness Checklist

☐ 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	

Equipment/Supplies: Respiratory (cont.)	
Bag-mask device, self-inflating	
☐ Infant (250 ml)	
☐ Child (450-500 ml)	
Non-rebreather masks	

Pediatric Readiness Checklist

☐ 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 (>10000 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 (child: 14-22F catheter)	
❑ Adult (24-40F catheter) or	
❑ Pigtail catheter kit (8.5-14F catheter)	
Hypothermia thermometer	
Inotropic agents (eg, digoxin and milrinone)	
Aryngoscope blade	
❑ Size 00	
❑ Umbar 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	

Produced by the AAP, ACEP, ENA and the EMSC Innovation and Improvement Center

SECTION 3 – APPENDICES

CA EMSC Regulations

CALIFORNIA EMSC REGULATIONS

- APPROVED – EFFECTIVE 7/1/19

GOAL / PURPOSE

To ensure children receive adequate & appropriate EMS to prevent loss of life & human potential, creating EMSC program.

- To protect welfare, health, & safety of pediatric patients.
- To provide consistent, equitable, & standardized criteria statewide
- Provide direction/requirements to local EMS for implementation of EMSC programs
- Clarify **REQUIREMENTS FOR LEMSA** to develop & implement EMSC programs
- Create quality improvement for **PEDIATRIC FACILITY DESIGNATIONS**
- Facilitate **RESOURCES & TRAINING** for prehospital providers & hospital EDs
  - **Ensure preparedness for providing medical care to pediatric patients, from neonates to adolescents.**

EMSC REGULATIONS - PedRCs

COMPREHENSIVE

- **Inpatient resources - NICU & PICU**
- **California Children's Services (CCS) tertiary hospital**
- Transfer agreements & regional referral center for specialized care pediatric patients.
- Can provide comprehensive care to any pediatric medical & surgical care child

ADVANCED

- **Community neonatal intensive care unit (NICU) or as an intermediate NICU**
- ED able to stabilize critically ill or injured infant, children, & adolescents prior to admission to PICU or transfer to Comprehensive PedRC facility.
- Establish formal agreements with minimum one Comprehensive PedRC for education/consult
- Participate with Comprehensive PedRC for pediatric education
- Establish transfer agreements with Comprehensive PedRC
- Establish transfer agreements for pediatric patients needing specialized care
- Specialties on-call & available for consult to ED within 30 minutes: Radiologist – with pediatric experience; neonatologist; general surgeon with pediatric experience; otolaryngologist with pediatric experience.

GENERAL

- Participate with Comprehensive &/or Advanced PedRC for pediatric emergency education
- Establish agreements with Comprehensive PedRC &/or Advanced PedRCs as approved by local EMS Establish transfer agreements for pediatric patients needing specialized care
- Have physician &/or nurse PECC which may be shared with other PedRCs.

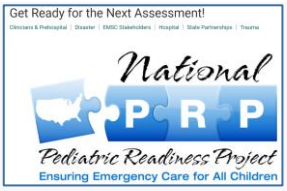
BASIC

- Establish agreements with at least one Comprehensive PedRC; Establish agreements with Advanced or General PedRCs; Establish transfer agreements for pediatric patients needing specialized care

SECTION 3 – APPENDICES

Alameda County Pediatric Readiness Training Plan 2021-22

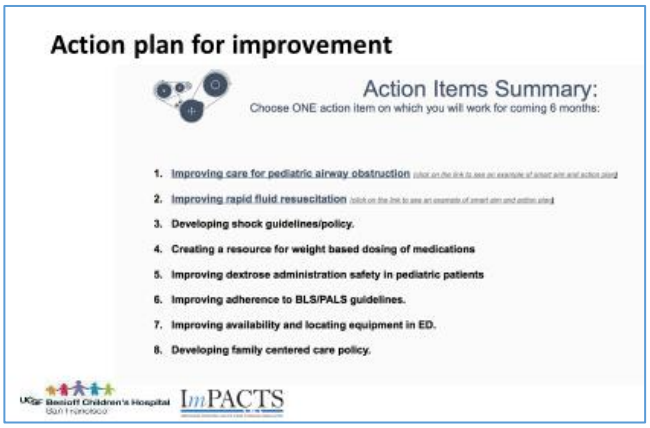
- **UCSF Benioff Children's Hospital Partnership**

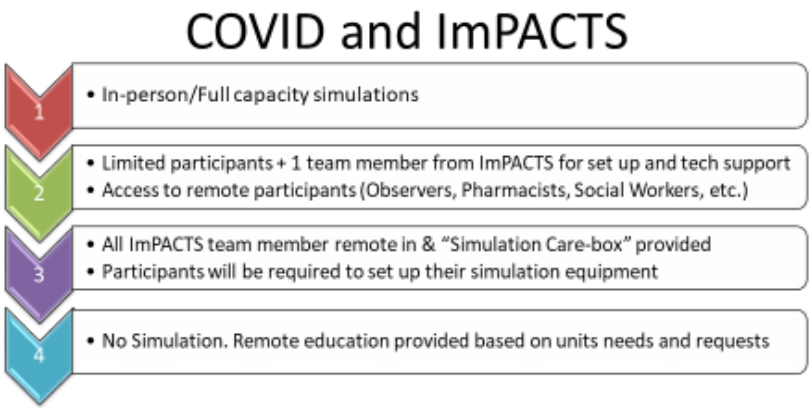


EMERGENCY DEPARTMENT PEDIATRIC READINESS/SITE VISIT EDUCATION PROJECT

The Alameda County EMS Agency strives to assist the various medical facilities in our County to be better prepared to handle pediatric patients during both day-to-day operations and during disaster/surge situations. **Below are resources and Alameda County EMS links related to those efforts**:

- 2020 ED Pediatric Site Visit Participation Form
- Alameda County's Pediatric Medical Surge Plan
- Pediatric Disaster Plan Template for Hospitals
- Pediatric (Non-PICU) Hospital Surge Plan Guidelines
- Pediatric Surge Plan Template
- Pediatric Surge Readiness Checklist
- Pediatric Readiness Fact Sheet
- Pediatric Readiness Assessment
- Inter Facility Transfer Tool Kit
- AAP Pediatric Preparedness Disaster Resource Kit
- National Pediatric Readiness Project and Toolkit
- Joint Policy Statement - Guidelines for Care of Children in the Emergency Department





3.8 PsyStart / Behavioral Health

Children Response to Trauma and Interventions

- 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 stay 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.

Neonates (< 1 month) and Infants (0-1 year)

- 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.

Toddlers (1-3 years) and Preschool-aged (3-5 years) 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 when 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?"

Middle Childhood (6-11 years)

- 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.
- 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.

3.8 PsyStart / Behavioral Health

Adolescents (12-18 years)

- 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.

How to Help Children During and After a Disaster

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.

Children Older than Five Years of Age

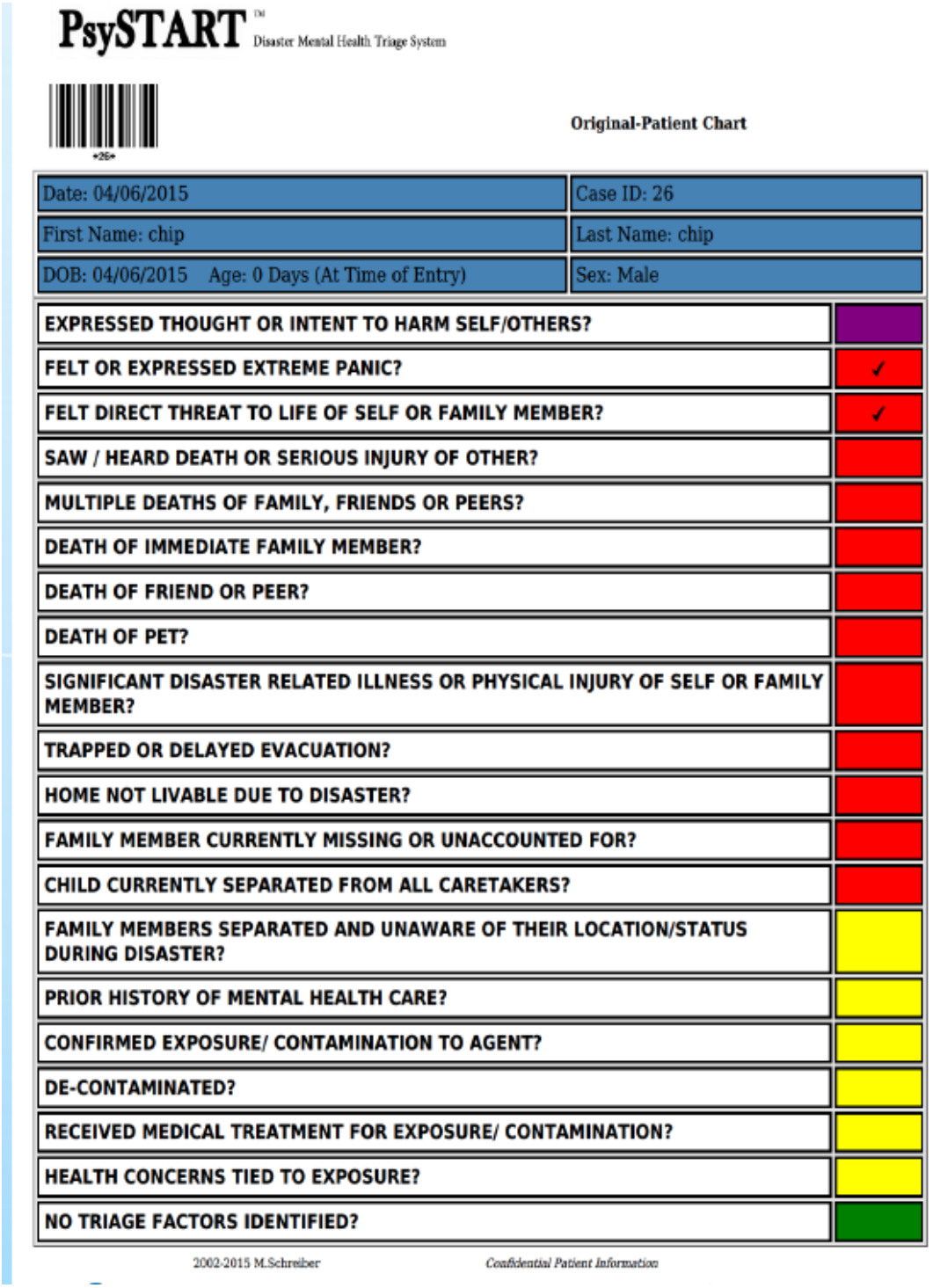
- Don't be afraid to ask them directly what is on their minds and answer their questions honestly.
- Talk to them about the news and any adult conversations they have heard.
- Make sure they have opportunities to talk with peers, if possible.
- Set gentle but firm limits for "acting out" behavior.
- Encourage expression, verbally and through play, of thoughts and feelings.
- Listen to their repeated retellings of the event.

When to Consult a Mental Health Professional

- Seek psychiatric consultation if children exhibit any of the following behaviors:
  - 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
  - Feelings of being helpless, hopeless, or worthless

3.8 PsyStart / Behavioral Health

PsySTART Rapid Pediatric Mental Health Triage System:
Western Regional Alliance for Pediatric Emergency
Management System End User Manual



PsySTART™ Disaster Mental Health Triage System

+26+

Original-Patient Chart

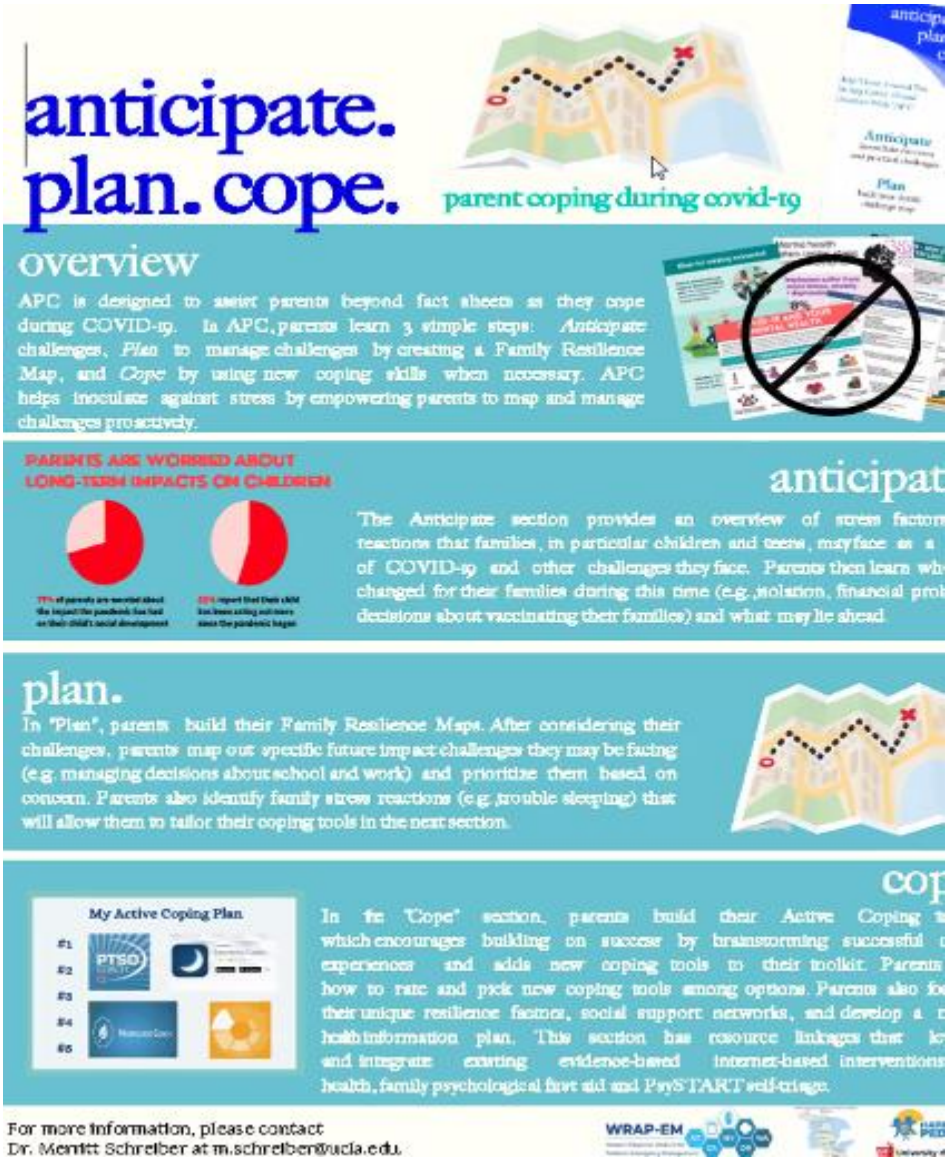
Date: 04/06/2015	Case ID: 26
First Name: chip	Last Name: chip
DOB: 04/06/2015 Age: 0 Days (At Time of Entry)	Sex: Male

EXPRESSED THOUGHT OR INTENT TO HARM SELF/OTHERS?	
FELT OR EXPRESSED EXTREME PANIC?	✓
FELT DIRECT THREAT TO LIFE OF SELF OR FAMILY MEMBER?	✓
SAW / HEARD DEATH OR SERIOUS INJURY OF OTHER?	
MULTIPLE DEATHS OF FAMILY, FRIENDS OR PEERS?	
DEATH OF IMMEDIATE FAMILY MEMBER?	
DEATH OF FRIEND OR PEER?	
DEATH OF PET?	
SIGNIFICANT DISASTER RELATED ILLNESS OR PHYSICAL INJURY OF SELF OR FAMILY MEMBER?	
TRAPPED OR DELAYED EVACUATION?	
HOME NOT LIVABLE DUE TO DISASTER?	
FAMILY MEMBER CURRENTLY MISSING OR UNACCOUNTED FOR?	
CHILD CURRENTLY SEPARATED FROM ALL CARETAKERS?	
FAMILY MEMBERS SEPARATED AND UNAWARE OF THEIR LOCATION/STATUS DURING DISASTER?	
PRIOR HISTORY OF MENTAL HEALTH CARE?	
CONFIRMED EXPOSURE/ CONTAMINATION TO AGENT?	
DE-CONTAMINATED?	
RECEIVED MEDICAL TREATMENT FOR EXPOSURE/ CONTAMINATION?	
HEALTH CONCERNS TIED TO EXPOSURE?	
NO TRIAGE FACTORS IDENTIFIED?	

2002-2015 M.Schreiber *Confidential Patient Information*

3.8 PsyStart / Behavioral Health

MENTAL HEALTH TRIAGE (PsySTART) MANAGER



3.9 Planning / Training / Exercises

Given the HPP requirements, pediatric surge training and exercises are a priority in the Alameda County EMSC workplan. The details are provided in the annual HPP project summaries and workplans.

Alameda County integrates pediatrics in all medical/health functional and state-wide exercises.

Alameda County actively promotes the annual state EMSC educational forums and other pediatric surge training events. Alameda County is considering integration of the Washington recommended training modules below:

PEDIATRIC WORKSHOP BREAKOUT SESSION OPTIONS

TITLE	DESCRIPTION	SUPPLIES
A. MCI Triage and Broselow Cases	First half of the session is spent triaging a pediatric MCI. Second half is working through 3 case scenarios using a worksheet and Broselow tape	-15-30 felt mannequins with corresponding triage descriptions -Broselow case worksheet -Broselow tape and other examples of color coded length based medication sheets -1 lead instructor; (3 assistants)
B. No IV Pumps? No Problem!	This session is design to teach the use of the buretrol for delivering accurate drip rates for pediatric fluids. -Participants receive a short introduction to the equipment needed -Participants are grouped in pairs -Participants are required to figure our drip rates and then set up an IV fluid system with buretrol to deliver the accurate rate -as an added twist, practice doing same procedure in the dark with headlamps.	-IV poles -IV fluid -40 and 60 drip buretrols -timers with seconds -headlamps -1 lead instructor; (2-3 assistants)
C. Simulation MCI	-Participants are given working scenario (i.e. ED, med-surg, OR) -2-3 cases are introduced in quick succession requiring each unit to figure out what their roles are in a surge MCI situation	-mannequins -treatment resources if desired (i.e. IV's ETT, IO's, BVM, C-collars) or these can all be verbalized -1 lead (2-3 assistants)
D. Pediatric Jeopardy	-Participants divide into teams -Slide show with questions in the form of Jeopardy game	-questions and answers -1 Lead
E. PICU Evacuation	-Participants are divided into Evacuation teams -PPT instruction firs 10-15 minutes outlining consideration and checklist for PICU evacuation -Each team gets practice preparing "Annie" to be evacuated in a Medsled down a stairwell	-Toddler mannequin -Transport vent -IV pumps -Chest tubes, IV drips, art lines, intracranial pressure monitors, etc. -Medsled -stairwell (at least 2 flights) -other Evac equipment (i.e. neonatal, evac chair, etc) -2 instructors

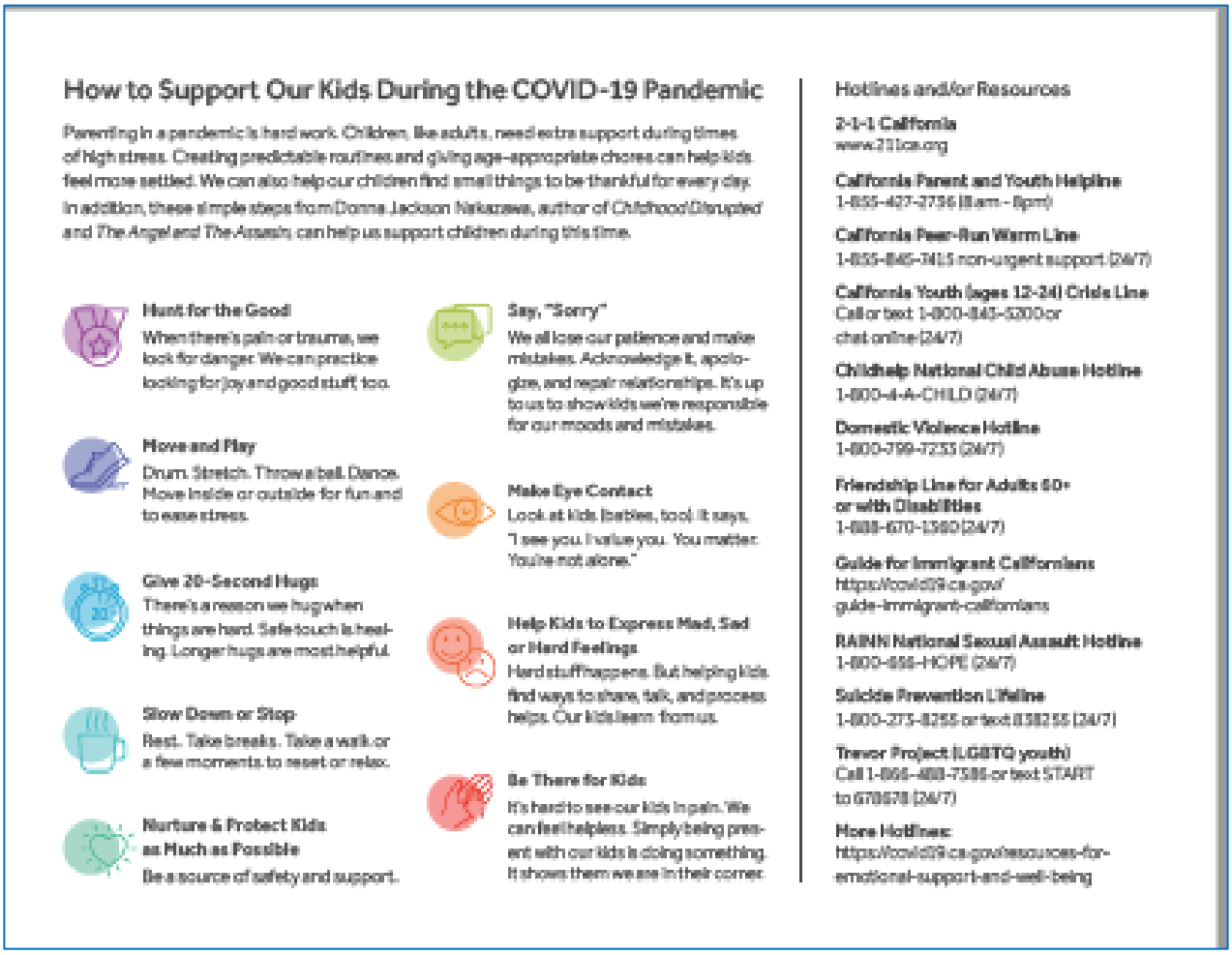
3.9 Planning / Training / Exercises

	-while teams are waiting various equipment and packaging techniques are demonstrated and can be practiced. -documentation and transfer paperwork discussed	
F. Pediatric Orthopedic	-Demonstration of common pediatric orthopedic injuries and how to stabilize them -Participants practice putting on splints	-plaster -webroll -stockinette -water buckets -table and floor coverings -cast scissors -1 lead, 2 assistants
G. McGyver Medicine	-Participants are given random commonly found supplies in a clinic or ER. -Cases are presented and they are asked to "make do" with what they have to treat the issue at hand	-varies depending on the expertise of the lead instructor: examples include: safety pins, towels, tape, cardboard, ace wraps, magazines, etc. -1 lead
G. Kids ARE just Small Adults	-Side by side pediatric and adult cases discussions -Interactive discussion about stabilization, treatment and disposition	-PPT -1 instructor
H. Pediatric Pain Management	-introducing alternate ways of managing pain and anxiety in children -Child life techniques -Oral and Intranasal options -IV sedation	-PPT -1 instructor
I. Pediatric Resources	-Review all the resources that will be made available to the participants to use in increasing their pediatric readiness	-PPT -1 instructor

3.10.1 Local Referral Resources for Children

Community and Non-Government Organizations (NGO)
• Alameda County NGO/CBOs provide some or all of the following disaster response and recovery support for children in Alameda County: Refer to list below:
Emergency Sheltering
• American Red Cross; faith-based-organizations
Feeding and Bulk Distribution
• Red Cross; Food Bank, Salvation Army, Private Sector Supplier
Childcare Services
• Select Childcare programs have contracts and MOUs with Alameda County for care and supervision of children (including unattended if needed) in shelters and childcare for emergency responders.(e.g., Church of the Brethren, Southern Baptist Children and Family Services, Head Start, other licensed child care programs, local faith-based organizations)
Reunification of Unaccompanied Minors
• National Center for Missing and Exploited Children, Red Cross Safe and Well) with DCFS and enforcement
Mental Health Support
• Red Cross Mental Health Services, local community-based mental health organizations, private practitioners
Child Care Resource and Referral programs
• Alameda County has critical roles to support individual child care providers and/or the response and recovery operation, when possible and as needed will include: Assistance with unmet needs (e.g., local Kiwanis Club, Lions Club, Rotary Club, private sector businesses, local NGOs with various mission statements).
Alameda County Child Care Resource and Referral Agencies:
❖ BANANAS, Inc., (North County): 510-658-7353,
❖ Hively (Formerly Child Care Links) (East County): 925-417-8733,
❖ Community Child Care Council of Alameda County (also known as, 4Cs of Alameda County), (South County): 510-582-2182.
American Red Cross
• Manages mass care operations at American Red Cross (Red Cross) shelters, feeding sites, and other Red Cross sites in coordination with SSA and other agencies and/or organizations supporting mass care.
• "Under the joint operating agreement between the Bay Area Chapter of the American Red Cross and the County of Alameda, organizing, mobilizing and directing the mass care and registration tasks of the Emergency Care and Shelter Operation of the Unincorporated Areas will be provided in a non-wartime emergency by the [Red Cross]."
Department of Developmental Services
• Provides support to County through Regional Center NGO/CBOs to support children's unmet needs.
• State Department of Social Services serves - lead State Mass Care & Shelter agency; coordinates CalFresh.

3.10.2 COVID-19 Referral Resources for Children and Families



How to Support Our Kids During the COVID-19 Pandemic

Parenting in a pandemic is hard work. Children, like adults, need extra support during times of high stress. Creating predictable routines and giving age-appropriate chores can help kids feel more settled. We can also help our children find small things to be thankful for every day. In addition, these simple steps from Donna Jackson Nakazawa, author of *Childhood Disrupted* and *The Angel and The Assasin*, can help us support children during this time.

Hunt for the Good
When there's pain or trauma, we look for danger. We can practice looking for joy and good stuff, too.

Move and Play
Drum. Stretch. Throw a ball. Dance. Move inside or outside for fun and to ease stress.

Give 20-Second Hugs
There's a reason we hug when things are hard. Safe touch is healing. Longer hugs are most helpful.

Slow Down or Stop
Rest. Take breaks. Take a walk or a few moments to reset or relax.

Nurture & Protect Kids as Much as Possible
Be a source of safety and support.

Say, "Sorry"
We all lose our patience and make mistakes. Acknowledge it, apologize, and repair relationships. It's up to us to show kids we're responsible for our moods and mistakes.

Make Eye Contact
Look at kids (babies, too)! It says, "I see you. I value you. You matter. You're not alone."

Help Kids to Express Mad, Sad or Hard Feelings
Hard stuff happens. But helping kids find ways to share, talk, and process helps. Our kids learn from us.

Be There for Kids
It's hard to see our kids in pain. We can feel helpless. Simply being present with our kids is doing something. It shows them we are in their corner.

Hotlines and/or Resources

2-1-1 California
www.211ca.org

California Parent and Youth Helpline
1-855-427-2736 (8 am - 8pm)

California Peer-Run Warm Line
1-855-845-7415 non-urgent support (24/7)

California Youth (ages 12-24) Crisis Line
Call or text 1-800-843-5200 or chat online (24/7)

Childhelp National Child Abuse Hotline
1-800-4-A-CHILD (24/7)

Domestic Violence Hotline
1-800-799-7233 (24/7)

Friendship Line for Adults 60+ or with Disabilities
1-888-670-1360 (24/7)

Guide for Immigrant Californians
https://covid19.ca.gov/guide-immigrant-californians

RAINN National Sexual Assault Hotline
1-800-656-HOPE (24/7)

Suicide Prevention Lifeline
1-800-273-8255 or text 838255 (24/7)

Trevor Project (LGBTQ youth)
Call 1-866-488-7386 or text START to 678678 (24/7)

More Hotlines:
https://covid19.ca.gov/resources-for-emotional-support-and-well-being

[Manage Stress for HealthWe might find comfort when we ...](#) PDF (221k)
7 Aug 2020: We can also help our **children** find small things to be thankful for every day. ... In addition, these simple steps from Donna Jackson Nakazawa, author of Childhood Disrupted and The Angel and The Assasin, can help us support **children** during this time.

[COVID-19 Alameda County Rapid Response Resources From the desk ...](#) PDF (770k)
26 Aug 2020: http://www.alameda.courts.ca.gov/Resources/Documents/COVID-19% 20May% 2020% 20Press% 20Release.pdf http://www.alameda.courts.ca.gov/Pages.aspx/COVID-19. 10 Women, Infant &**Children** (WIC). ... HRC Drop-In Update https://www.abodeservices.org/alameda-county.

[COVID-19 Considerations for Extreme Heat & Unhealthy Air Quality](#) PDF (401k)

3.10.2 COVID-19 Referral Resources for Children and Families

How to spot symptoms of MIS-C, a rare condition in children exposed to COVID-19

WHAT WE KNOW ABOUT MIS-C

Multi-system Inflammatory Syndrome in Children (MIS-C) occurs as multiple organ systems become inflamed. Many signs of MIS-C seem mild or vague, but the illness can progress rapidly. MIS-C is currently associated with COVID-19, cases have been reported in areas where COVID-19 is most prevalent. It typically appears several weeks after exposure - caregivers may not be aware that the child had or was exposed to COVID-19.

MAINTAIN A HIGH DEGREE OF SUSPICION FOR MIS-C

Ask if the child was exposed to COVID-19, or had any contact with a sick person. The presentation varies widely among patients. Some children may experience severe illness - they usually decompensate rapidly, requiring prompt critical care. Consider MIS-C if any child presents with FEVER (>100.4) for >48 hours with involvement of at least two of the following organ systems:

- ☐ Gastrointestinal (GI)
- ☐ Respiratory
- ☐ Hematologic - Lymphatic
- ☐ Renal
- ☐ Dermatologic
- ☐ Neurologic
- ☐ Cardiac

SYMPTOMS MAY INCLUDE ANY OF THE FOLLOWING:

- ☐ Abdominal pain (most common complaint)
- ☐ Fatigue (irritability or sluggishness)
- ☐ Poor appetite/difficulty feeding, too sick to drink fluids
- ☐ Nausea (with or without vomiting/diarrhea)
- ☐ Rash anywhere on the body (pale, patchy or blueish)
- ☐ Conjunctivitis or bloodshot eyes
- ☐ Pharyngitis (red, swollen or sore throat)
- ☐ Enlarged lymph nodes on the neck - can be one sided (may be described as "neck pain")
- ☐ Red or cracked lips
- ☐ Red (strawberry) tongue
- ☐ Swollen or red hands or feet

Vital signs – are VITAL for any child seen, especially those with fever and concern for MIS-C. Acquire full set of accurate vital signs – BP, HR, RR – repeat the measures. Look for evidence of shock - altered mental status, tachycardia, hypotension and/or tachypnea - as some children decompensate quickly.

INCREASED SUSPICION FOR SYNDROME PROGRESSION IF:

- Child was seen by healthcare provider before this EMS call and sent home (multiple visits)
- Known COVID exposure – especially a few weeks ago
- Tachycardia, hypotension, or elevated respiratory rate
- Chest pain with MIS-C signs/symptoms
  - Increased concern for serious consequences of MIS-C and cardiac involvement
  - Get an EKG – likely to demonstrate EKG changes (indicates need for workup now)

MDHHS

3.11 National Resources for Pediatric, Children and Families Planning

Pediatric COVID JIT Resources, Webinars, Data, Listservs and Collaboratives

- AAP Critical Updates on COVID-19 https://bit.ly/3cCKvbh
- CDC COVID-19 Caring for Children https://bit.ly/2WAdxms
- EIIC COVID Resources: https://bit.ly/2EDUEJ4
- COVID-19 Data: North American PICUs https://covid19.myvps.org/
- OPENPediatrics (COVID) Public Group https://bit.ly/2LA4uvi
- ACOG COVID-19 Obstetric Preparedness https://bit.ly/2Tb1zO1
- Pediatric COVID Tracking Data https://bit.ly/36bWMDm
- Pediatric COVID webinars and collaboratives https://bit.ly/3l0uiRj
- REMS COVID Resources for Schools:https://rems.ed.gov/coronavirus
- National Association of School Nurses: https://bit.ly/346RFl9
- COVKID Project: https://www.covkidproject.org/
- Paediatric International Patient Safety and Quality Community (PIPSQC) https://www.pipsqc.org/

Pediatric Disaster Care Centers of Excellence

- Eastern Great Lakes Pediatric Consortium for Disaster Response (EGLPCDR) https://bit.ly/2Z0DmxF
- Western Regional Alliance for Pediatric Emergency Management WRAP-EM https://wrap-em.org/

Emergency Medical Services for Children Initiatives

- EMSC Innovation and Improvement Center https://emscimprovement.center/
- EMSC Toolkits https://emscimprovement.center/education-and-resources/toolkits/
- National Pediatric Readiness Project https://bit.ly/2LqkyQj
- Pediatric Readiness Quality Collaborative https://emscimprovement.center/collaboratives/prqc/
- Pediatric Disaster Preparedness https://emscimprovement.center/domains/preparedness/
- National Emergency Medical Services for Children Data Analysis Resource Center (NEDARC) https://www.nedarc.org/
- Pediatric Emergency Care Applied Research Network http://pecarn.org/

Pediatric Surge Annex Resources

- Illinois State Pediatric and Neonatal Surge Annex https://bit.ly/368z9K1
- Alameda County California Pediatric Surge Plan Template https://bit.ly/2Wykncl
- Los Angeles County http://file.lacounty.gov/SDSInter/dhs/206938_cms1_206938.pdf
- NYC Pediatric Disaster Healthcare Preparedness Toolkit http://www.programinfosite.com/pdc/resources/
- Rady Childrens Surge Planning Train the Trainer https://bit.ly/2WtW6nt
- California Department of Public Health Pediatric Surge https://bit.ly/2T0P5Z6
- ASPR TRACIE Pediatric Surge Annex Webinar https://bit.ly/2T2DfxP

3.11 National Resources for Pediatric, Children and Families Planning

Pediatric Disaster Reunification Resources

- Children Separated by Disaster: Reunification Challenges and Resources Webinar https://youtu.be/8mjPYn8cnFQ
- Family Reunification Following Disasters: https://www.aap.org/en-us/Documents/AAP-Reunification-Toolkit.pdf
- National Center for Missing & Exploited Children https://www.missingkids.org/HOME
- Red Cross Safe and Well https://safeandwell.communityos.org/cms/index.php
- Unaccompanied Minor Reunification Checklist https://bit.ly/2Z6ekNw
- Post-Disaster Reunification of Children: A Nationwide Approach https://bit.ly/3dNpWJw

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Pediatric Disaster Mental Health

- National Center for School Crisis and Bereavement -- https://www.schoolcrisiscenter.org/
- National Child Traumatic Stress Networkhttps://www.nctsn.org/
- Listen, protect, connect (LPC) Psychological First Aid System https://www.fema.gov/media library/assets/documents/132712
- Child Mind Institute https://childmind.org/
- Foltin GL, Schonfeld DJ, Shannon, MW (editors). Pediatric Terrorism and Disaster Preparedness: A Resource for pediatricians. AHRQ Publication No. 06-0056-EF. Rockville, MD: Agency for Healthcare Research and Quality. October 2006. -- http://archive.ahrq.gov/research/pedprep/pedresource.pdf

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Children with Special Needs (CFAN) Disaster Resources

- CDC Children with Special Healthcare Needs https://bit.ly/3bvpz4MHHS Public Health Emergency: Hurricane Response
- Resources for Children with Special Health Care Needs https://bit.ly/2T7C54f
- Complex Child (monthly online magazine for families) https://complexchild.org/
- AAP Children and Youth with Special Needs https://bit.ly/2zCYYpl\
- The Center for Children with Special Needs https://bit.ly/3dGIXxg
- Autism Speaks Disaster Resources https://www.autismspeaks.org/autism-speaks-natural-disaster-resources
- Cerebral Palsy Guidance https://bit.ly/3dGIXxg
- Emergency Preparedness for Families of Children with Special Needs (Virginia) https://bit.ly/2T8YuOGDisaster Survival
- Resources Simplifying Survival: Disaster Preparedness Special Needs https://bit.ly/360myIH

Disaster Planning for OB/GYN & NICU

- Stanford OB Disaster Planning Toolkit: https://obgyn.stanford.edu/divisions/mfm/disaster-planning.html
- American College of OB/GYN (ACOG) Hospital Disaster Preparedness for Maternity Care https://bit.ly/2Z4SxWz
- Disaster Planning for Obstetric Units: OB TRAIN
- https://bit.ly/2zzKTccPregnant Women in Disasters and Emergencies: https://disasterinfo.nlm.nih.gov/pregnant-women
- Neonatal Disaster Preparedness
- https://www.cpqcc.org/content/can-neonatal-disaster-preparedness-toolkit
- CDC Disaster Safety for Expecting and New Parentshttps://bit.ly/2WZFcwi
- Loma Linda Pediatric Neonatal Disaster Reference Guidehttps://bit.ly/2WMp4xK

3.11 National Resources for Pediatric, Children and Families Planning

Children and Disasters Research and Reports

- 2020 National Academies From Hurricane Katrina to Paradise Wildfires, Exploring Themes in Disaster Human Services: Workshop 1 - Children and Youth in Disasters https://bit.ly/2S2ZSkS\
- 2020 Department of Homeland Security "Enhancing School Safety Using a Threat Assessment Model: An Operational Guide For Preventing Targeted School Violence: https://bit.ly/345cPAe
- 2019 Natural Hazards Center Children and Disaster Special Collection: https://bit.ly/3cDG6oL
- National Advisory Committee on Children and Disasters (NACCD):https://bit.ly/3cvNaDP
- Institute of Medicine Preparedness, Response & Recovery Considerations for Children and Families https://bit.ly/2LqkyQj
- 2010 National Commission on Children and Disasters: https://bit.ly/2y7Fqcf

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Pediatric Disaster Triage Systems

- JumpSTART Pediatric Triage Algorithm https://chemm.nlm.nih.gov/startpediatric.htm
- SALT (Sort,Assess, Lifesaving Interventions, Treatment/Transport) https://www.remm.nlm.gov/salttriage.htm
- TRAIN: Triage by Resource Allocation for INpatients: Matching medical transport to patient need https://www.stanfordchildrens.org/en/research-innovation/train?
- PsySTART: Psychological Simple Treatment and RapidTriage https://www.oregon.gov/oha/HSD/Pages/PSYSTART.aspx

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Pediatric CBRNE Resources

- Radiation Emergency Medical Management (REMM) - https://www.remm.nlm.gov
- INFANTS AND CHILDREN - https://www.remm.nlm.gov/radiation_children.htm
- PREGNANT WOMAN AND FETUS - https://www.remm.nlm.gov/specialpops.htm#children
- National Emerging Special Pathogens Training and Education Center (NETEC) https://netec.org/
- Pediatric Medical Countermeasures Resources for Public Health Preparedness (FDA) https://bit.ly/2WyoJjH
- Chemical Hazards Emergency Medical Management (CHEMM) https://chemm.nlm.nih.gov/

Child Care Disaster Resources

- Child Care Aware of America: http://usa.childcareaware.org/families-programs/resources/crisis-and-disaster-resources/
- The Child Care Resource Center (CCRC): https://www.ccrcca.org/providers/emergency-preparedness
- Childcare Disaster Preparedness (UCSF): https://cchp.ucsf.edu/content/disaster-preparedness
- Institute for Childhood Preparedness: https://www.childhoodpreparedness.org/

American Academy of Pediatrics (AAP) Disaster Resources

- Children's & Disasters https://bit.ly/2T2DwAR
- Healthychldren.org Building Resilience https://bit.ly/3czTOsE
- Children & Disaster Educational Tools https://bit.ly/3cw9X2k

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Federal Disaster Resources for Children and Families

- ASPR TRACIE Pediatric Technical Resource https://asprtracie.hhs.gov/technical-resources/31/pediatric-children/0
- CDC Caring for Children https://www.cdc.gov/childrenindisasters/
- FEMA Ready Kids: https://www.ready.gov/kids
- NHTSA Hospital Discharge Recommendation for Safe Transport of Children https://bit.ly/35Z5Idi
- Health and Human Services/ASPR Webinar Pediatric Issues in Disasters https://bit.ly/2WrVChH

3.11 National Resources for Pediatric, Children and Families Planning

American Red Cross Pediatric Disaster Resources

- Make a Plan https://rdcrss.org/2WTiJAH
- Pillow Case Project https://bit.ly/2LnskKZ
- Child Safety-Before During & After A Disaster https://rdcrss.org/2xZ2GJe
- School Disaster Preparedness https://rdcrss.org/2YZgUF1

Save the Children Disaster Resources

- Family Emergency Preparedness Get Ready. Get Safe kits and Lesson Books https://bit.ly/2Z7hfpv
- Disaster Report Cards https://bit.ly/2AlpG60

WRAP-EM Recommended Resources

- **Texas A&M Engineering Extension Services Course titled "Medical Countermeasures: Point of Dispensing (POD), Planning and Response": https://teex.org/class/mgt319/**
- **The National Academies' Framework for Equitable Allocation of COVID-19 Vaccine report: http://ow.ly/TTZG50BGUPh**
- **The Pediatric Overflow Planning Contingency Response Network (POPCORN) resources:**
  - **Home page: https://www.popcornetwork.org/ - - Webpage on health system operations: https://www.popcornetwork.org/health-systems-operational-protocols**
- **A Journal of Hospital Medicine article titled "Children's Hospitals Caring for Adults During a Pandemic: Pragmatic Considerations and Approaches": https://www.journalofhospitalmedicine.com/jhospmed/article/220705/hospital-medicine/childrens-hospitals-caring-adults-during-pandemic**
- **The webpage for the National Academies Security of America's Medical Product Supply Chain - Committee Meeting 2 and Public Workshop: https://www.nationalacademies.org/event/12-01-2020/security-of-americas-medical-product-supply-chain-committee-meeting-2-and-public-workshop#sl-three-columns-fa1c5f25-4c59-4ecb-861d-49368ac74b85**
- **Children's Hospital Association resources:**
  - **Webpage for a policy discussion coordinating pediatric hospital care to increase capacity for adults with COVID-19: https://www.childrenshospitals.org/Quality-and-Performance/COVID19/Resources/Consolidating-Pediatric-Hospital-Care-Increase-Capacity-Adults-COVID19**
- **Coordinating Hospital Care for Children to Increase Capacity for the Surge in COVID-19 Patients report:**
  - **https://www.childrenshospitals.org/-/media/Files/CHA/Main/Quality_and_Performance/covid19/covid_cha_pediatric_consolidation_guidance.pdf**
- **The Accreditation Council for Graduate Medical Education guidance on pandemic emergency status: https://www.acgme.org/Stage-3-Pandemic-Emergency-Status-Guidance**
- **CDC's webpage for the V-Safe App: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/vsafe.html**
- **Virtual Pediatric Systems (VPS) website: https://www.myvps.org/**

3.12 COVID-19 Resources and Considerations

- Multi-System Inflammatory Syndrome in Children (MIS-C)

- **Health Department-Reported Cases of MIS-C in the United States**

  CDC Information MIS-C: Case Definition; Clinical Presentation

  - As of October 1, the number of cases meeting the case definition for multisystem inflammatory syndrome in children (MIS-C) in the United States surpassed 1,000.
  - Since mid-May 2020, CDC has been tracking reports of multisystem inflammatory syndrome in children (MIS-C), a rare but serious condition associated with COVID-19. MIS-C is a new syndrome, and many questions remain about why some children and adolescents develop it after a COVID-19 illness or contact with someone with COVID-19, while others do not.

- Last updated December 4, 2020 - - https://www.cdc.gov/mis-c/cases/index.html

Summary

- Most cases were in children and adolescents between the ages of 1 and 14 years, with an average age of 8 years.
- Cases have occurred in children and adolescents from <1 year old to 20 years old.
- More than 75% of reported cases have occurred in children who are Hispanic or Latino (460 cases) or Black, Non-Hispanic (410 cases).
- 99% of cases (1,269) tested positive for SARS CoV-2, the virus that causes COVID-19. The remaining 1% were around someone with COVID-19.
- Most children developed MIS-C 2-4 weeks after infection with SARS-CoV-2.
- Slightly more than half (56%) of reported cases were male.

Case definition

Case Definition for Multisystem Inflammatory Syndrome in Children (MIS-C)

- An individual aged <21 years presenting with fever[i], laboratory evidence of inflammation[ii], and evidence of clinically severe illness requiring hospitalization, with multisystem (≥2) organ involvement (cardiac, renal, respiratory, hematologic, gastrointestinal, dermatologic or neurological); AND
- No alternative plausible diagnoses; AND
- Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or COVID-19 exposure within the 4 weeks prior to the onset of symptoms

[i]Fever >38.0°C for ≥24 hours, or report of subjective fever lasting ≥24 hours
[ii]Including, but not limited to, one or more of the following: an elevated C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), fibrinogen, procalcitonin, d-dimer, ferritin, lactic acid dehydrogenase (LDH), or interleukin 6 (IL-6), elevated neutrophils, reduced lymphocytes and low albumin

Additional comments

- Some individuals may fulfill full or partial criteria for Kawasaki disease but should be reported if they meet the case definition for MIS-C
- Consider MIS-C in any pediatric death with evidence of SARS-CoV-2 infection

MIS-C Clinical Presentation

- Patients with MIS-C usually present with persistent fever, abdominal pain, vomiting, diarrhea, skin rash, mucocutaneous lesions and, in severe cases, with hypotension and shock. They have elevated laboratory markers of inflammation (e.g., CRP, ferritin), and in a majority of patients laboratory markers of damage to the heart (e.g., troponin; B-type natriuretic peptide (BNP) or proBNP).
- Some patients develop myocarditis, cardiac dysfunction, and acute kidney injury. Not all children will have the same signs and symptoms, and some children may have symptoms not listed here. MIS-C may begin weeks after a child is infected with SARS-CoV-2. The child may have been infected from an asymptomatic contact and, in some cases, the child and their caregivers may not even know they had been infected. - - https://www.cdc.gov/mis-c/hcp/

3.12 COVID-19 Resources and Considerations

COVID-19 Alameda County Rapid Response Resources

From the desk of the AC Care Connect Consumer & Family Fellowship Peer-to-Peer Advisors

Updated Biweekly & Posted on the ACPHD site here under General Resources *8/23/2020 Edition*

Contact: CAPPCG@acgov.org

8	Santa Rita County Jail	○ All in-person visiting suspended, including all contact, non-contact visits and use of video visiting kiosks in the lobby until further notice	3/4/20	https://www.alamedacountysheriff.org/dc_srj_visiting.php
9	Superior Court	○ Execution of any writ of possession (eviction) for real property issued before July 13, 2020, is hereby stayed up to and through December 31, 2020, and no payment of undertaking for this period shall be owed by any defendant ○ As of June 20, 2020, bail for misdemeanor and felony offenses are set at $0.00, with exceptions and clarification (see link) ○ Beginning June 15, 2020, the Court resumed processing papers related to appeals submitted for filing during the closure period ○ The Court will resume civil and criminal jury trials, starting June 8, 2020, with jurors first being summoned to report on June 29, 2020 ○ As of June 1, 2020, the Court will resume or expand numerous court functions, effectively "reopening" to the extent that court business can be conducted remotely within existing resource and technological limitations ○ For Court changes related to Shelter-in-Place effective March 17- May 31, 2020, and for all Court updates and information related to COVID-19, see link	8/14/20 6/20/20 6/12/20 6/5/20 6/1/20 3/17/20 – 5/31/20	http://alameda.courts.ca.gov/Resources/Documents/Emergency%20Local%20Rule%201.8a%20-%20(April%2010,%202020;%20amended%20August%2014,%202020).pdf http://www.alameda.courts.ca.gov/Resources/Documents/ExecOffice/COVID-19%20June%2016%20Press%20Release%20-FINAL.pdf http://www.alameda.courts.ca.gov/Resources/Documents/COVID-19%20June%2012%20Press%20Release%20-FINAL.pdf http://www.alameda.courts.ca.gov/Resources/Documents/COVID-19%20June%205%20Press%20Release.pdf http://www.alameda.courts.ca.gov/Resources/Documents/COVID-19%20May%2020%20Press%20Release.pdf http://www.alameda.courts.ca.gov/Pages.aspx/COVID-19
10	Women, Infant & Children (WIC)	○ Income Guidelines Table effective 5/01/2020 – 6/30/2021 ○ New WIC food choices during COVID-19	5/1/20 4/8/20	https://m.wic.ca.gov/JoinWIC/IncomeGuidelines.aspx https://www.cdph.ca.gov/Programs/CFH/DWICSN/Pages/TemporaryAPLExpansion.aspx

5 of 30

COVID-19 Alameda County Rapid Response Resources

From the desk of the AC Care Connect Consumer & Family Fellowship Peer-to-Peer Advisors

Updated Biweekly & Posted on the ACPHD site here under General Resources *8/23/2020 Edition*

Contact: CAPPCG@acgov.org

	Women, Infant & Children - WIC (Cont.)	○ Find newly authorized WIC foods by scanning barcodes using WIC App (download at the Google Play Store or Apple App Store) ○ If WIC foods are out of stock at your local authorized grocer, use the WIC Grocer Search to find other stores: https://m.wic.ca.gov/Grocers/GrocerSearch.aspx ○ In-person office visits suspended until further notice ○ Apply for WIC by phone at 510-595-6400 ○ All appointments conducted by phone ○ Benefits issued remotely		Find Your WIC Foods During COVID-19 Flyer - English Find Your WIC Foods During COVID-19 Flyer - Spanish http://www.acphd.org/wic.aspx
11	**Housing Resource Centers (HRCs)**			
12	All HRCs	○ Drop-in hours suspended ○ Screenings, assessments and housing support provided via telephone appointments	3/17/20	HRC Drop-In Update
13	211 Alameda County	○ Operators have all the updates and are sending callers to the appropriate HRC numbers		http://211alamedacounty.org/
14	Domestic Violence, Sexual Assault or Human Trafficking	○ If you are in immediate danger, call 911 ○ Call 211 or the hotline at 1-800-799-7233 or 1-800-787-3224 (TTY) for services, shelter and housing information		http://211alamedacounty.org/2-1-1-alameda-county-resource-finder/ Look under "Physical Health"
15	Oakland & Emeryville	○ Any families or individuals who are still sheltered but face a crisis such as a 3 day pay or quit notice, an eviction notice, call BACS Keep Oakland Housed Program at 510-613-0330 x2 ○ Unsheltered families (with a child under 18):		HRC Drop-In Update https://www.keepoaklandhoused.org/whoweare https://www.bayareacs.org/ https://bfwc.org/the-family-front-door/

3.12 COVID-19 Resources and Considerations - for Pediatric, Children and Families Planning

COVID-19 Alameda County Rapid Response Resources

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Contact: CAPPCG@acgov.org

19	Livermore, Dublin Pleasanton (East County/Tri-Valley)	○ All unsheltered adults and families: call Abode at 510-371-0447		HRC Drop-In Update https://www.abodeservices.org/alameda-county
20	Fremont, Newark Union City (South County/Tri-City)	○ All unsheltered adults and families: call Abode at 510-330-5822		HRC Drop-In Update https://www.abodeservices.org/alameda-county
21	**Free "Grab & Go" Meals for Children under 18**			
22	Oakland Unified School District (OUSD)	○ "Grab and Go" meals available at 22 designated schools throughout the city for any OUSD student **enrolled** in TK - 12th grade **(see link for locations)** ○ Multiple meals pick-ups are: Monday and Thursday; 8:00am to 1:00pm ○ Please bring either: • Letter from Nutrition Services which includes child's ID# and barcode; **OR** • Student's ID card with Aeries ID# from last year; **OR** • Provide staff with student's name, grade and school they attend at pick-up ○ Students need not be present to pick-up food ○ Face coverings are required	Effective: 8/10/20	Oakland USD "Grab and Go" meals information OUSD "Grab and Go" map

3.13 WRAP-EM - Resources for Pediatric, Children and Families Planning

WRAP-EM

Western Regional Alliance for Pediatric Emergency Management

AZ CA NV OR WA

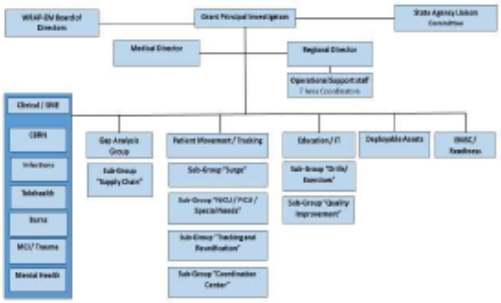
A New Standard of Excellence: The WRAP-EM alliance represents the most extensive collection of pediatric preparedness and response experts ever conceived. This progressive foundation has been established with an unprecedented public and private partnership – integrating community facilities traditionally not admitting children in the western United States. WRAP-EM consists of five states (Arizona, California, Nevada, Oregon and Washington), serving 13 million children.

Goal: To develop regional pediatric disaster planning and response capabilities – through collaboration between all levels of government and hospitals – that effectively match resources to needs for a catastrophic incident.

Focal Points:

1. To clarify communication pathways between public and private organizations for optimal outcomes in a disaster.
2. To support the significant pediatric-specific needs encountered by both the initial care in place and the subsequent movement of children following any event across the entire west coast.
3. To minimize the impact of physical and mental trauma, infectious disease exposure, burn damage and other consequences of natural and unnatural agents.
4. To transcend state lines and supplement medical staff and expertise through pediatric strike teams, just-in-time training, and advancements in remote clinical technology.
5. To strengthen and expand existing capacities of EMS and hospitals to transport and receive infants and children including during mass casualty incidents.
6. To identify strategies for sharing pediatric equipment, supplies and pharmaceuticals where they are most needed.
7. To integrate hospitals with schools, EMS, fire departments and law enforcement agencies for rapid family reunification during a multi-state response.

Institutions: Seattle Children's Hospital, Harborview Medical Center, Oregon Health & Science University, UC Davis, UCSF, Stanford, Valley Children's Hospital, Loma Linda University, Children's Hospital LA, USC, Harbor-UCLA, Cedars Sinai, Rady Children's Hospital (UCSD), University Medical Center (UNLV), Phoenix Children's Hospital



Key Partners: State Departments of Health, State EMS and EM, Healthcare Coalitions, Western Pediatric Preparedness Partnership (WPPP), Poison Control Centers, Western Region Burn Disaster Consortium, National Ebola Training & Education Center (NETEC), AMR Ambulance, Reach / Calstar Air Medical Ambulance, Kaiser Permanente, Providence Healthcare

For more information, please contact christopher.newton@ucsf.edu, or visit https://wrap-em.org/

SECTION 3 – APPENDICES

3.14.1 Acronyms

Acronym/ Abbreviation	Description
ACRECC	Alameda County Regional Emergency Communications Center
ADA	Americans with Disability Act
BHCS	Behavioral Health Care Services
BLS	Basic Life Support
CAGOES	California Governor's Office of Emergency Services
CAL-MAT	California Medical Assistance Team
CalFRESH	California name for Federal Supplemental Nutrition Assistance Program
CBO	Community-Based Organization
CCRC	Child Care Resource Center
CFR	Code of Federal Regulations
CHA	California Hospital Association
ConOps	Concept of Operations
CRCG	Children's Response Coordination Group
DCFS	Department of Children and Family Services
DHV	Disaster Health Volunteers
DMAT	Disaster Medical Assistance Team
DOC	Department Operations Center
DPHC	Disaster Preparedness Healthcare Coalition
EMS	Emergency Medical Services
EMSA	Emergency Medical Services Authority
EMS-C	Emergency Medical Services for Children
EOC	Emergency Operations Center
EOM	Emergency Operations Manual
EOP	Emergency Operations Plan
FAC	Family Assistance Center
FAST	Functional Assessment and Service Team
FCC	Federal Coordinating Center
FEMA	Federal Emergency Management Agency
GOES	Governor's Office of Emergency Services
GSA	Alameda County General Services Agency
HCC	Health Care Coalition
HCF	Health Care Facility
HCSA	Alameda County Health Care Services Agency
HICS	Hospital Incident Command System
HPP	Hospital Preparedness Plan
IC	Incident Commander
ICS	Incident Command System
IFT	Interfacility Transportation
ICU	Intensive Care Unit
JFO	Joint Field Office
JPMT	Joint Patient Movement Team
LEMSA	Local Emergency Medical Services Authority
M/HB	Medical Health Branch
MCI	Mass Casualty Incident
MERS	Mobile Emergency Response System
MHCC	Medical Health Coordinating Center
MHOAC	Medical Health Operational Area Coordination/Coordinator
MOU	Memorandum of Understanding
MPERT	Mobile Pediatric Emergency Response Team
MPIRT	Mobile Pediatric Intensivist Response Team
MRC	Medical Reserve Corps
MTS	Medical Tech Specialist
NICU	Neonatal Intensive Care Unit
NGO	Nongovernmental Organization
NIMS	National Incident Management System
OA EOC	Operational Area Emergency Operations Center
OEM	Office of Emergency Management
OES	Office of Emergency Services

SECTION 3 – APPENDICES

3.14 Acronyms

OEM	Office of Emergency Manager
OHSES	Alameda County Sheriff's Office of Emergency Services
PAFN	People with Disabilities and Others with Access and Functional Needs
PECC	Pediatric Emergency Care Coordinators
PICU	Pediatric Intensive Care Unit
PIO	Public Information Officer
PMP	Patient Movement Plan
POC	Point of Contact
POD	Point of Dispensing
Red Cross	American Red Cross
RDMHC	Regional Disaster Medical and Health Coordination/Coordinator
REOC	Regional Emergency Operations Center
SEMS	Standardized Emergency Management System
SEP	State Emergency Plan
SME	Subject Matter Expert
SOC	State Operational Center
SSA	Alameda County Social Services Agency
TRAIN	Triage by Resource Allocation for INpatients
UCSFBCH	UCSF Benioff Children's Hospital
WIC	Women, Infants, and Children

3.15 Essential Elements of Information (EEIs) – Planning

- Alameda County conducts pediatric surge planning assessments as needed. The following EEI data tool is adapted from Washington State Pediatric Coalition

Phone Numbers and Addresses – All Participating Healthcare Facilities Please provide the best phone numbers to reach Pediatric Specific Floors, Units or Supervisor.				
Facility	Address	24/7 Emergency Contact #	*Floor Phone	Transfer Center Contact Number

Licensed Beds with Neonatal and Pediatric Capabilities *Not Surge Capacity Beds				
Facility	NICU Beds	PICU Beds	Peds Med / Surg Beds	Peds Beh. Health

*Sample Levels of Surge				
	Beds	Beds	Space	Staff/Stuff
	Averarge Daily Census - Peak Season	Time to Surge to Licensed Beds (hours, days, etc.)	Number of additional beds above Licensed you could surge to in Crisis* explain where additional bedspace is located	What resources are needed to surge to Crisis
NICU CAPACITY				
PICU CAPACITY				
PEDS MED / SURG PATIENTS				
PEDS BEHAVIORAL CAPACITY				

3.15 Essential Elements of Information (EEIs) – Planning

	Maximum Number of HFOV (including Jet ventilators)
HIGH FREQUENCY OSCILLATORY VENTILATION (HFOV)	
	Maximum Number CRRT machines
CONTINUOUS RENAL REPLACEMENT THERAPY (CRRT)	
	Maximum Number Machines
PERITONEAL DIALYSIS	
	YES/NO (Do you have all supporting capabilities)
CARDIAC SURGERY (PRE-OP & IMMEDIATE POST-OP)	
Pediatric Surgery	

	YES/NO (Do you have all supporting capabilities)		
HIGH COMPLEXITY SPECIAL SURGERY (PRE-OP & IMMEDIATE			
Pediatric Neurosurg			
	Maximum number of machines		
ECMO			
	Burn information in annex referral		
	Maximum number of pediatric oncologists	Maximum number of pediatric onc. nurses	Maximum number of hem/onc pharmacists
Hem/Onc	change to Y/N		

NIPPV CPAP BIPAP HFNC

3.16 Telehealth

Telemedicine Resources: * Module 3 TTX**

- **Understanding Virtual Care (Telemedicine) Overview - What Is Virtual Care?**
  - **https://alameda.networkofcare.org/mh/library/article.aspx?hwid=acl2140**
- **Telehealth Connections for Children and Youth**
  - **http://www.healthyalamedacounty.org/promisepractice/index/view?pid=777**
- **FAQs: COVID-19 Telehealth and HIPAA Privacy & Security**
  - **https://www.acbhcs.org/Providers/News/2020/Telehealth%20&%20HIPAA%20FAQs%20for%20HCSAStaff%20FINAL.pdf**
- **Community Based Organization Clinic Care & Urgent Care Clinics in Alameda County**
  - **Community Based Organization (CBO) Care: https://covid-19.acgov.org/covid19-assets/docs/community-resources/cbo-clinic-care-urgent-care-in-alameda-county-2021.08.04.pdf**
- **Starting Out Strong Telehealth Practice and Guidelines**
  - **https://www.calwic.org/wp-content/uploads/2020/04/Alameda-County-WIC_Telehealth-Guidelines.pdf**
- **Telehealth Frequently Asked Questions**
  - **https://www.dhcs.ca.gov/provgovpart/Pages/TelehealthFAQ.aspx**
- **Setting Interfacility CCP transports - Telemedcine**
  - **2020 Alameda County EMS - Critical Care Paramedic (CCP) Field Manual**
  - **http://ems.acgov.org/ems-assets/docs/Clinical/Field%20Protocols/2020%20ALCO%20EMS%20CCP%20Policy%20Guidelines.pdf**