NEW JERSEY HEALTHCARE COALITIONS

National Healthcare Coalition Preparedness Conference (NHCPC) 2024

Compendium of Presentations and Associated Materials Categorized as

Pediatrics

Please contact our team at RHCC@NJHA.com should you have questions or if you encounter any difficulties accessing these presentations.

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Presented By:

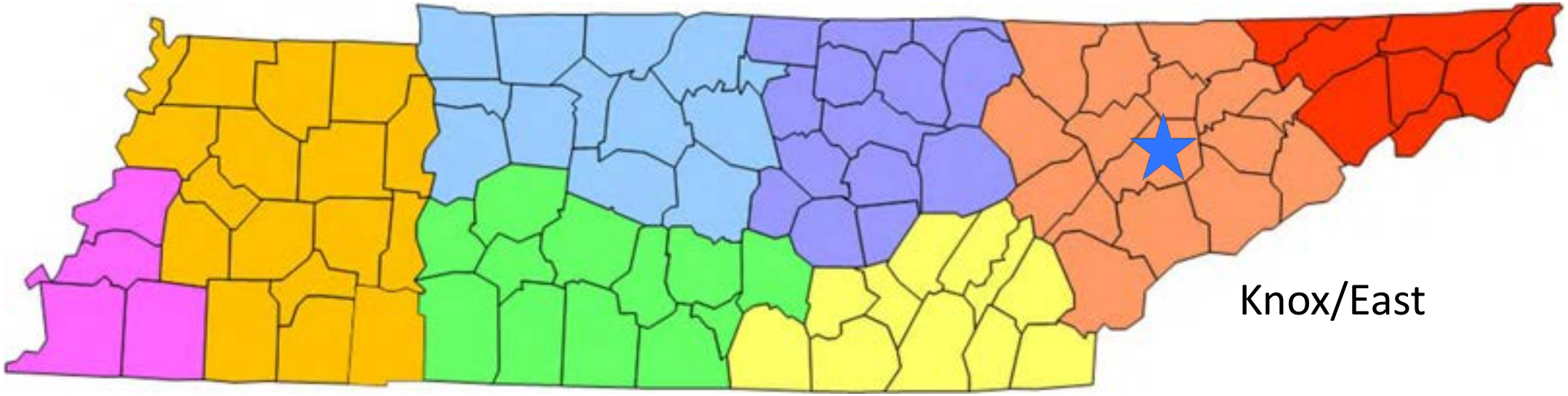
MESH

Enhancing Trauma & Pediatric Care

Simulation-Based Training Outreach in Rural Areas

Oseana Bratton BSN, RN, CPEN, AEMT
Katie Hall BA, CC-Paramedic, IC, NRP

Tennessee Healthcare Coalitions



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Non-Disclosure

We have no financial gain or investment in regards to the following information or medical recommendations.

Specific items featured in this presentation were chosen based on regional needs and after discussion with key stake holders.

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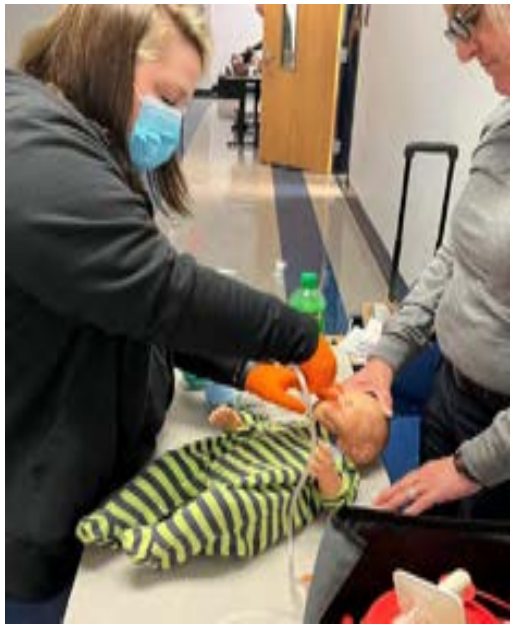
What is Simulation-Based Learning (SBLE)?

- **Simulation**: Imitation of a situation of process.
- **Modality**: The type of simulation used
- **Fidelity:** "The degree to which the simulation replicates the real event and/or workplace; this includes physical psychological and environmental elements.“
  - Physical
  - Conceptual
  - Psychological

What is Simulation-Based Learning (SBLE)?



Low Fidelity

- Often without the psychological and environmental components
- Task training

High Fidelity

- Includes all simulation components, resulting in more realistic training

Why Simulation-Based Learning (SBLE)?

Why Simulation-Based Learning (SBLE)?

- High-fidelity Simulations
  - Teach, Assess, Evaluate
  - Valuable for learners of all levels
  - Superior to standardize testing in assessing competency
  - Promotes student engagement
  - Development of clinical reasoning
  - Safe learning environment
  - Teamwork/communication/leadership

Why Simulation-Based Learning (SBLE)?

- Simulation is not easy
  - Training the trainer
  - Stakeholders & Buy-in
  - Simulation ratios
  - Financial support
  - Psychological safety

Pediatric Simulation Project

Overview & Background

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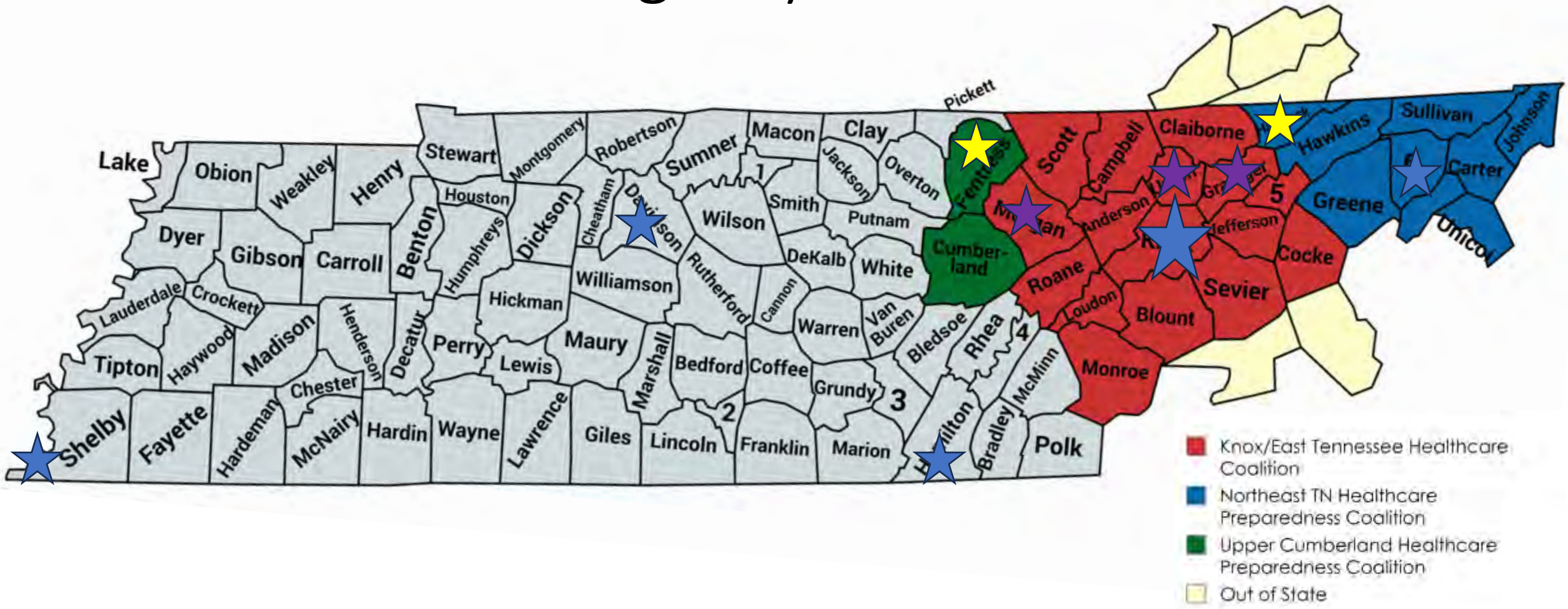
East Tennessee Children's Hospital

TN Pediatric Emergency Care Facilities

- TN Pediatric Emergency Care Facility Designation
  - Basic Facility
  - Primary Facility
  - General Facility
  - Comprehensive Regional Pediatric Center

CECA TN
CHILDREN'S EMERGENCY CARE ALLIANCE

TN Pediatric Emergency Care Facilities



What is Simulation-Based Learning (SBLE)?

2023 Transfers

- 1166 Accepted Patients
  - 563 Rural
  - 199 Knox County
- 329 Phone Consults
  - 150 Rural
  - 29 Knox County


44


LANE
SHIFT
AHEAD
EMERGENCY
EMERGENCY
AND CLINICS
ENTRANCE
DROP OFF


7 AM Sat
7 PM Fri
7 PM Sat
7 AM Fri
100W
95W
90W
85W
80W
75W
70W


129
TRAIN DERAILMENT
Maryville
EVACUATION AREA
Big Spring Rd
FOOTHILLS MALL

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Disaster: a sudden event, such as an accident or a natural catastrophe, that causes great damage or loss of life.

Only **10%** of 911 calls involve children.

Of those, only **1%** will be critical.

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About **25%** of any given population is children under the age of 18 years.

It all started when….

Training

- Purchase Pediatric Simulator
- ETCH EMS Coordinator to provide pediatric focused training to hospitals and EMS

Supplies

- Focused on infants through 8 years
- Pediatric specific mass casualty supplies for region wide 911 EMS providers
- Provide each hospital with ED equipment and supplies for 20 pediatric patients over and above their required amounts

Exercise

- Spring 2017: Tabletop
- Fall 2017: Full Scale

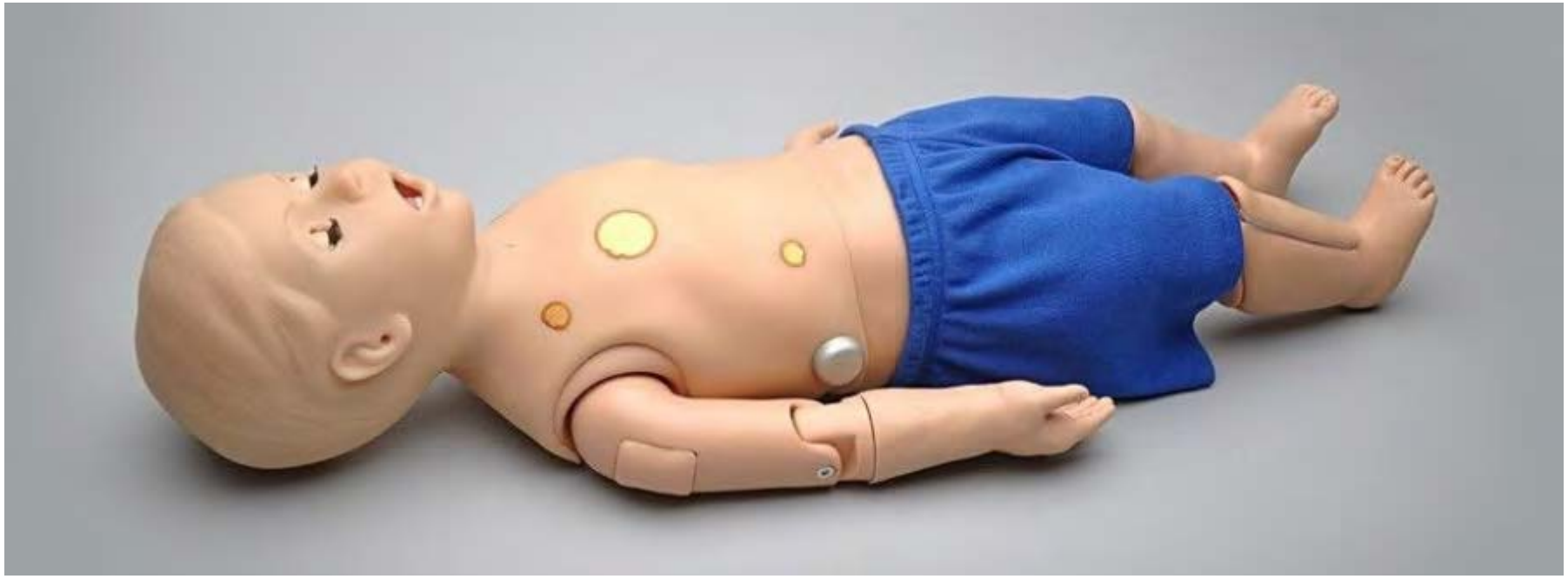
EMS Supplies

- Purchased for each ambulance in the region (~ 300)
- Partnership with Region 2 EMS Director's Association
- Budget: $37,000

Hospital Supplies

- All hospitals were eligible
- Must attend 75% of HCC meetings
- Must commit to maintaining supplies.

Pediatric Simulation Timeline



2016

FIRST SIMULATOR PURCHASED

East Tennessee Children's Hospital

Monroe Carell Jr. Children's Hospital at Vanderbilt

Le Bonheur Children's Hospital

Children's Hospital at Erlanger

Pediatric Simulation Timeline

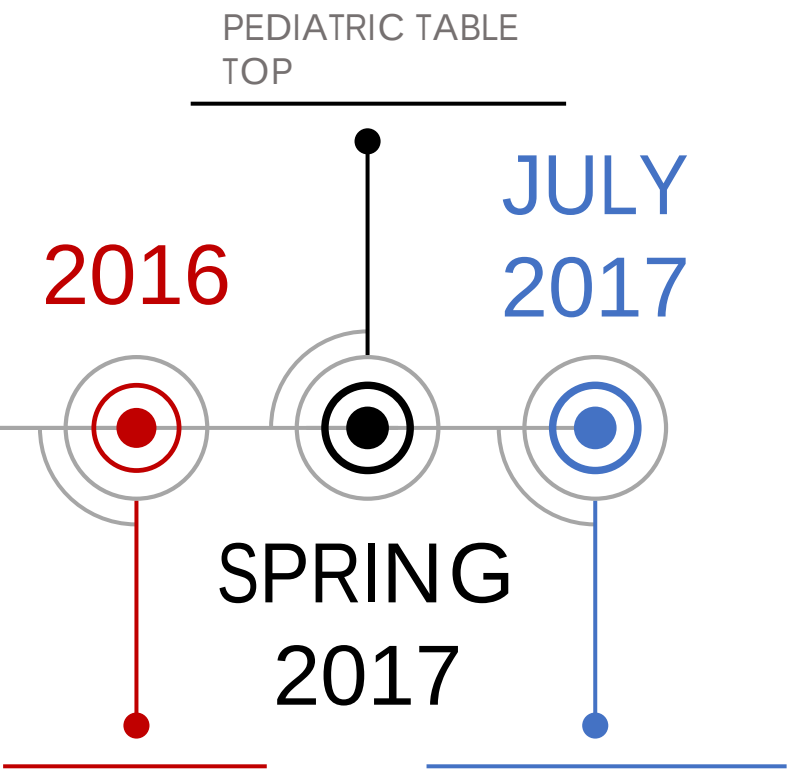
PEDIATRIC TABLE TOP

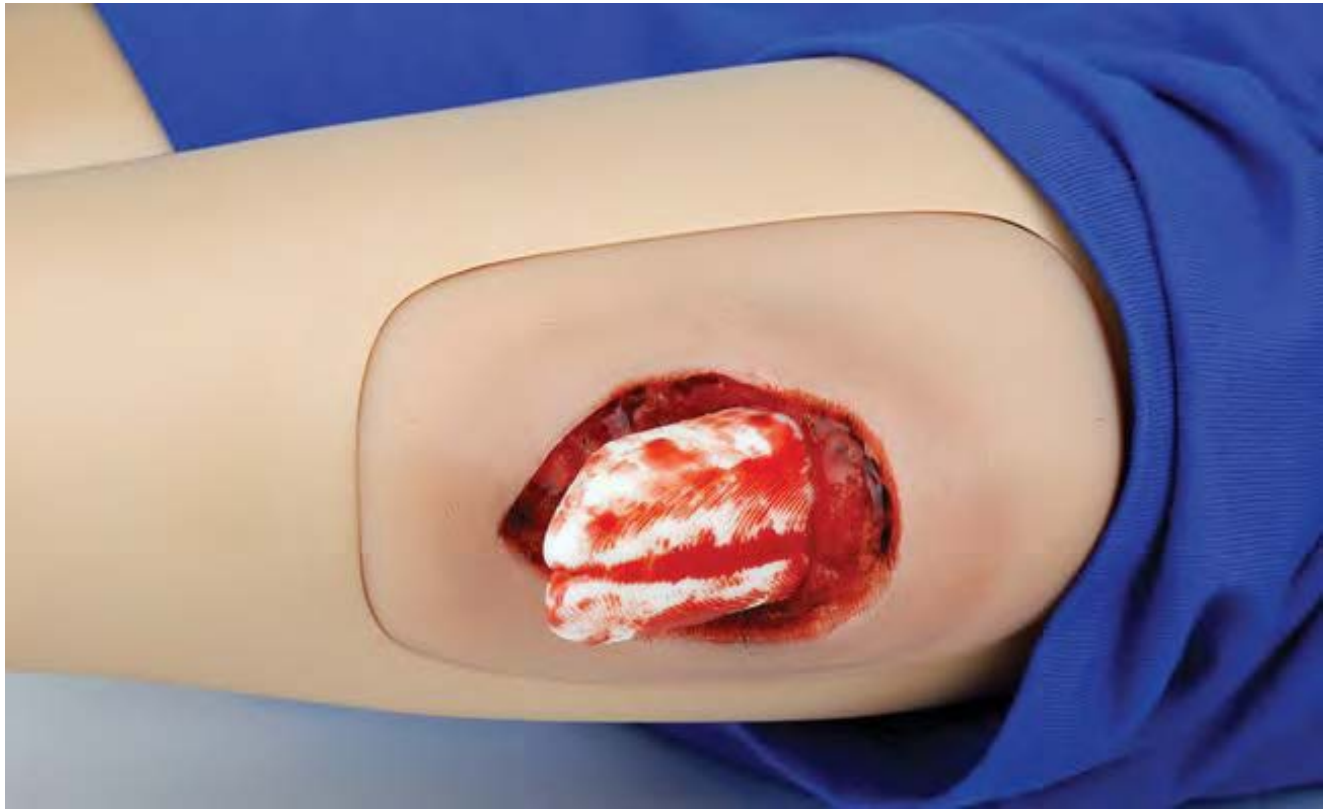
2016

SPRING 2017

FIRST SIMULATOR PURCHASED

Pediatric Simulation Timeline





Pediatric Simulation Timeline

PEDIATRIC TABLE TOP

PEDIATRIC FULL SCALE

2016

JULY 2017

SPRING 2017

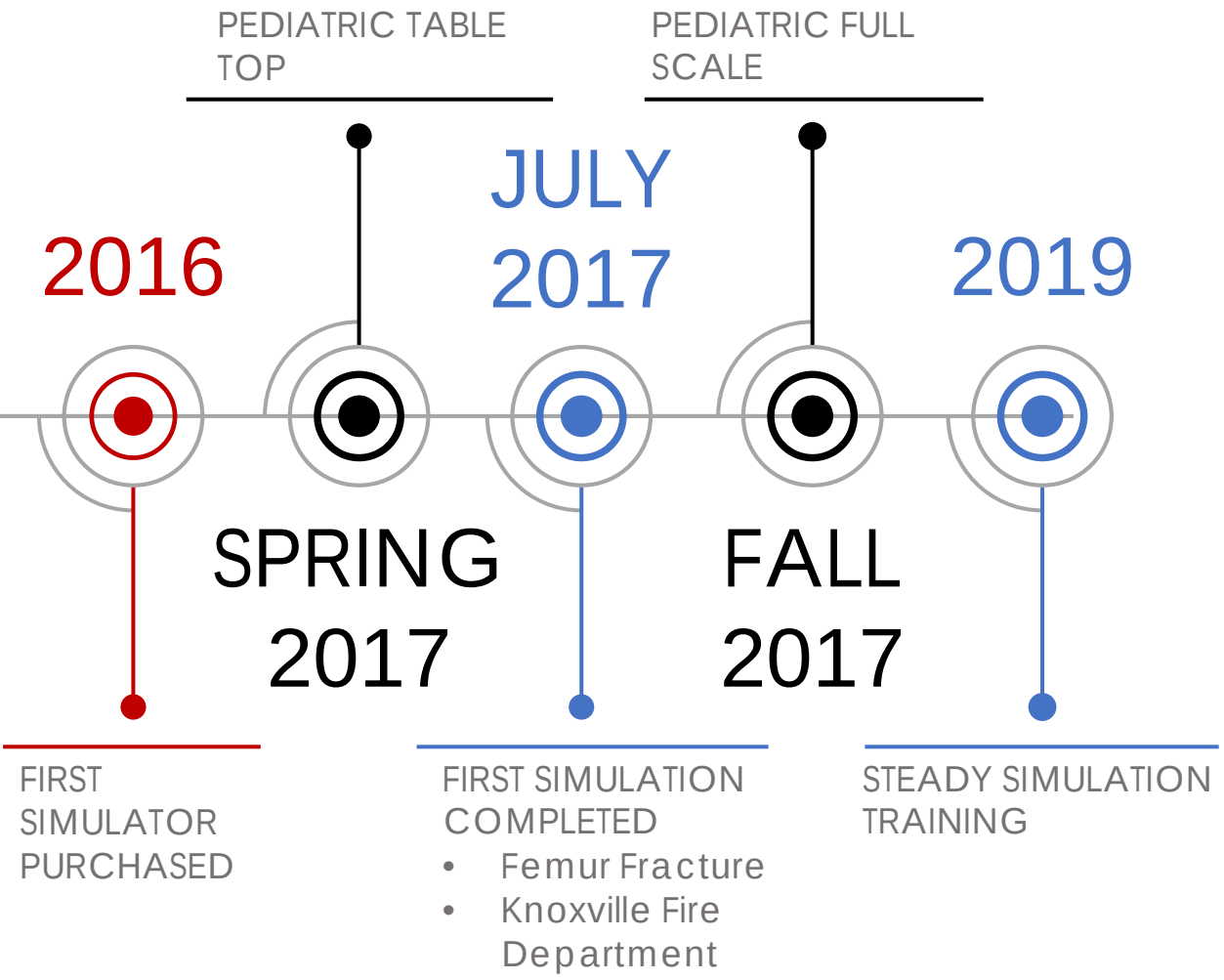
FALL 2017

FIRST SIMULATOR PURCHASED

FIRST SIMULATION COMPLETED

- Femur Fracture
- Knoxville Fire Department

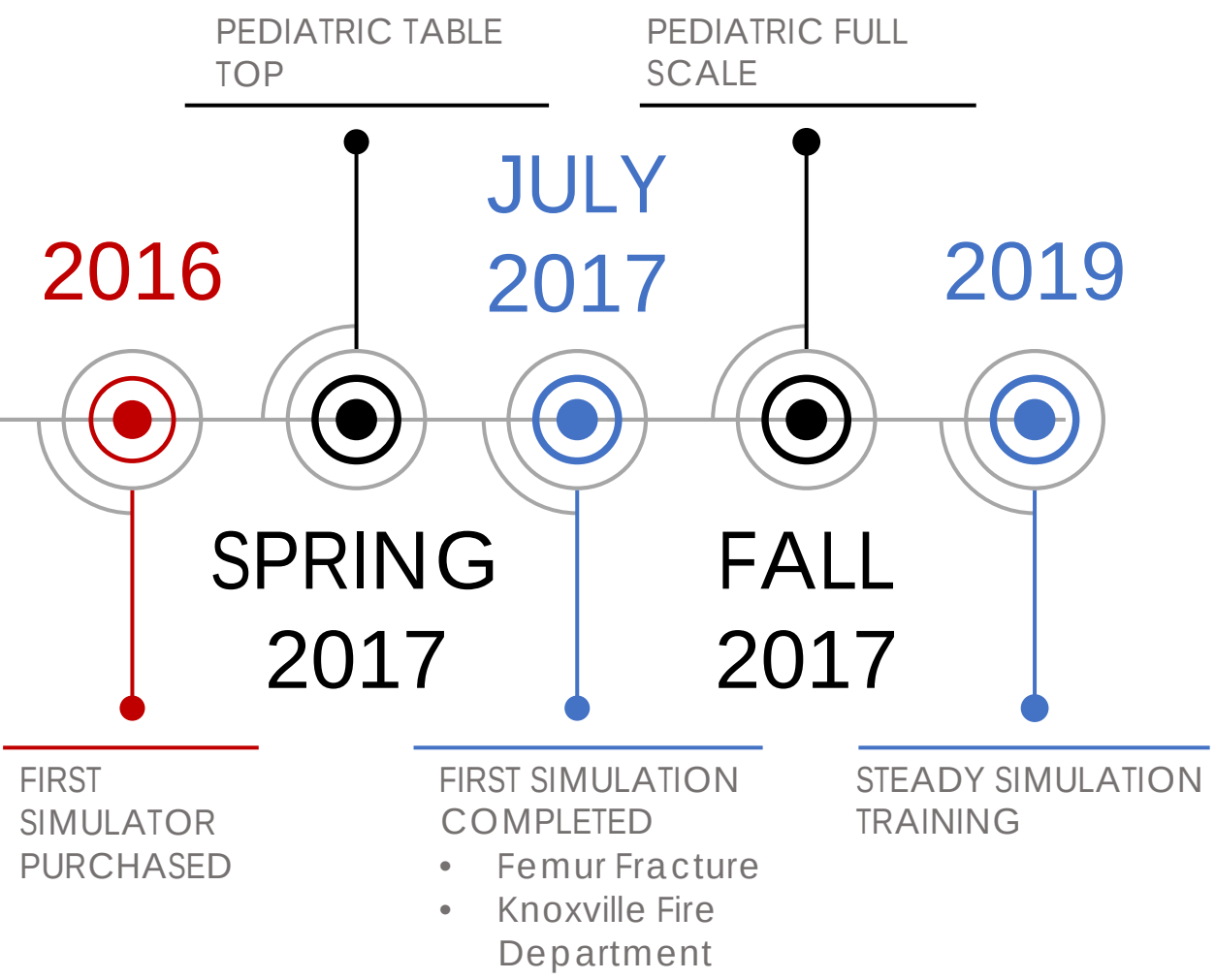
Pediatric Simulation Timeline



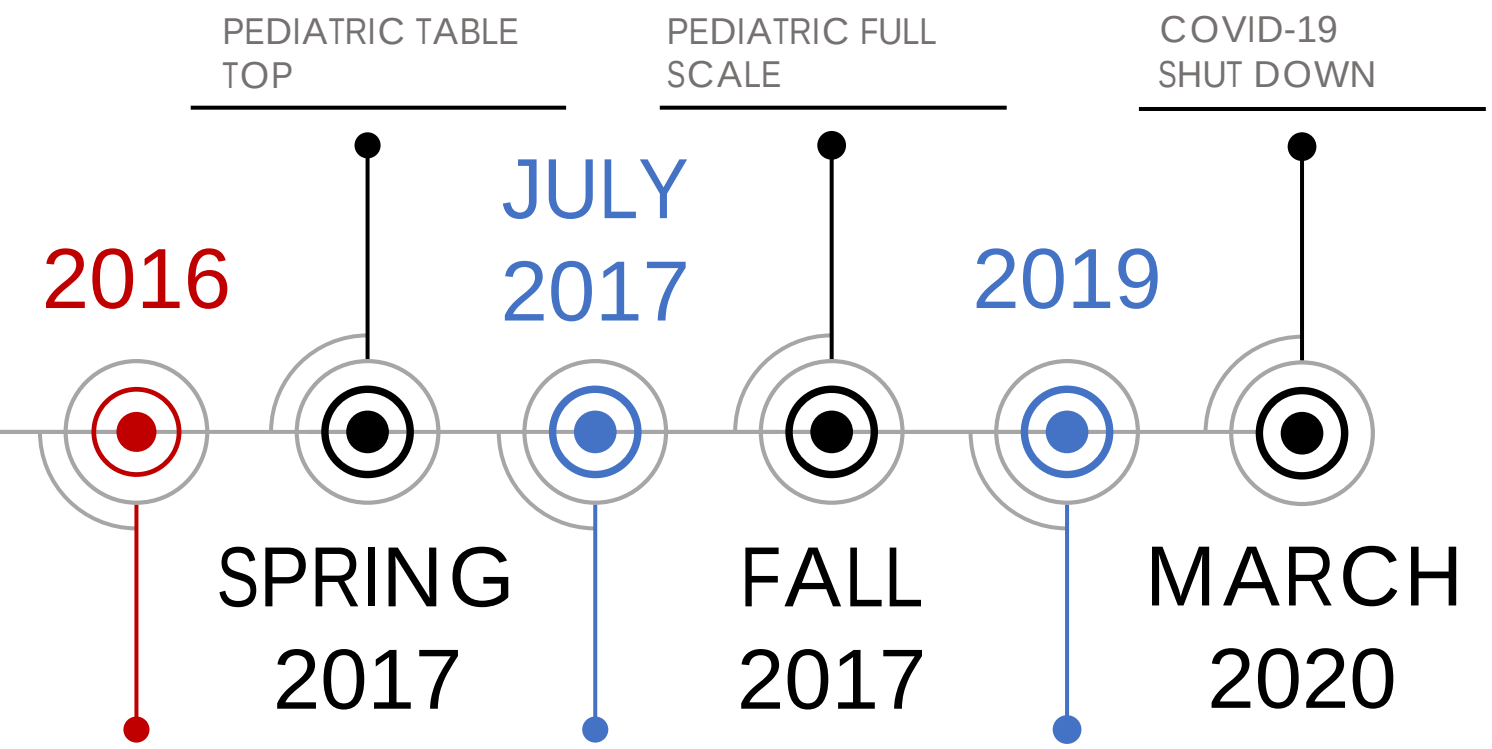
2019 Training Numbers

- 89 Simulations
  - Cardiac Arrest
  - Seizures
  - Drowning
  - Sepsis
- 505 Providers Trained
- 872 Providers Total (including lectures)

Pediatric Simulation Timeline



Pediatric Simulation Timeline



Pediatric Simulation Timeline

2016
FIRST SIMULATOR PURCHASED

SPRING 2017
PEDIATRIC TABLE TOP

JULY 2017
FIRST SIMULATION COMPLETED
- Femur Fracture
- Knoxville Fire Department

FALL 2017
PEDIATRIC FULL SCALE

2019
STEADY SIMULATION TRAINING

MARCH 2020
COVID-19 SHUT DOWN

MAY 2021
TRAINING RESUMES

ADDITIONAL TEAM MEMBER

Representation Matters

- Trauma presentation
- Perfusion assessment
- Skin anomalies (i.e. rash)

Pediatric Simulation Timeline

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MAY 2021
TRAINING RESUMES

ADDITIONAL TEAM MEMBER

MAY 2022
SCHOOL NURSE CONFERENCE

Pediatric Simulation Timeline

2016
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FIRST SIMULATION COMPLETED
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FALL 2017
PEDIATRIC FULL SCALE

2019
STEADY SIMULATION TRAINING

MARCH 2020
COVID-19 SHUT DOWN

MAY 2021
TRAINING RESUMES

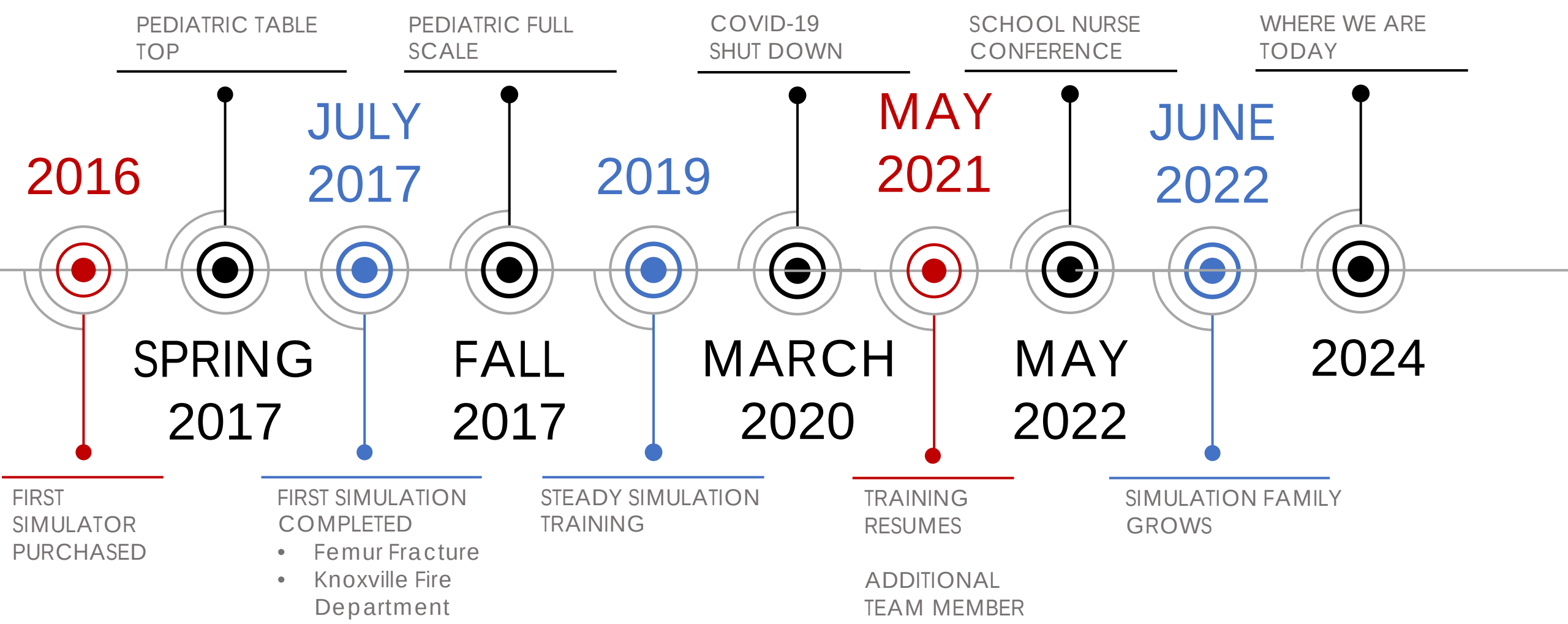
ADDITIONAL TEAM MEMBER

MAY 2022
SCHOOL NURSE CONFERENCE

JUNE 2022
SIMULATION FAMILY GROWS

THE UNIVERSITY OF TENNESSEE MEDICAL CENTER
Wisdom for Your Life.

Pediatric Simulation Timeline



Where We Are Today

Where We Are Today

2023 Training Numbers

- <u>180 Simulations</u>
  - Abusive Head Trauma
  - DKA
  - Ventilator Training
  - Airway Management
  - Vital Signs
- <u>180 Simulations</u>
  - 728 EMS
  - 70 Nurses

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Coming Soon…

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Coming Soon…

#NHCPC24

Coming Soon…

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National Benchmarks - Hospitals

1.1 Pediatric Readiness Recognition Programs

Program Goal: To increase the percent of hospitals with an ED recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric emergencies.

1.2 Pediatric Emergency Care Coordinators

Program Goal: To increase the percent of hospitals with an ED that have a designated nurse, physician, or both who coordinates pediatric emergency care.

1.3 Weigh and Record Children's Weight in Kilograms

Program Goal: To increase the percent of hospitals with an ED that weigh and record children in kilograms.

1.4 Disaster Plan Resources

Program Goal: To increase the percent of hospitals with an ED that have a disaster plan that address the needs of children.

National PRP

Pediatric Readiness Project

Ensuring Emergency Care for All Children

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National Benchmarks - Prehospital

2.1 Pediatric Readiness Recognition

Program Goal: To increase the percent of prehospital EMS agencies recognized through a statewide, territorial, or regional standardized pediatric readiness program that can stabilize and/or manage pediatric emergencies.

2.2 Pediatric Emergency Care Coordinators

Program Goal: To increase the percent of prehospital EMS agencies in the state that have a designated individual(s) who coordinates pediatric emergency care.

2.3 Use of Pediatric-Specific Equipment

Program Goal: To increase the percent of prehospital EMS agencies in the state that have a process that requires prehospital practitioners to physically demonstrate the correct use of pediatric-specific equipment.

2.4 Disaster Plan Resources

Program Goal: To increase the percent of prehospital EMS agencies that have a disaster plan addressing the needs of children.

National PRP

Prehospital Pediatric Readiness Project

Ensuring Emergency Care for All Children

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Stroke & Trauma Simulation Project

Overview

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Stroke & Trauma Simulation

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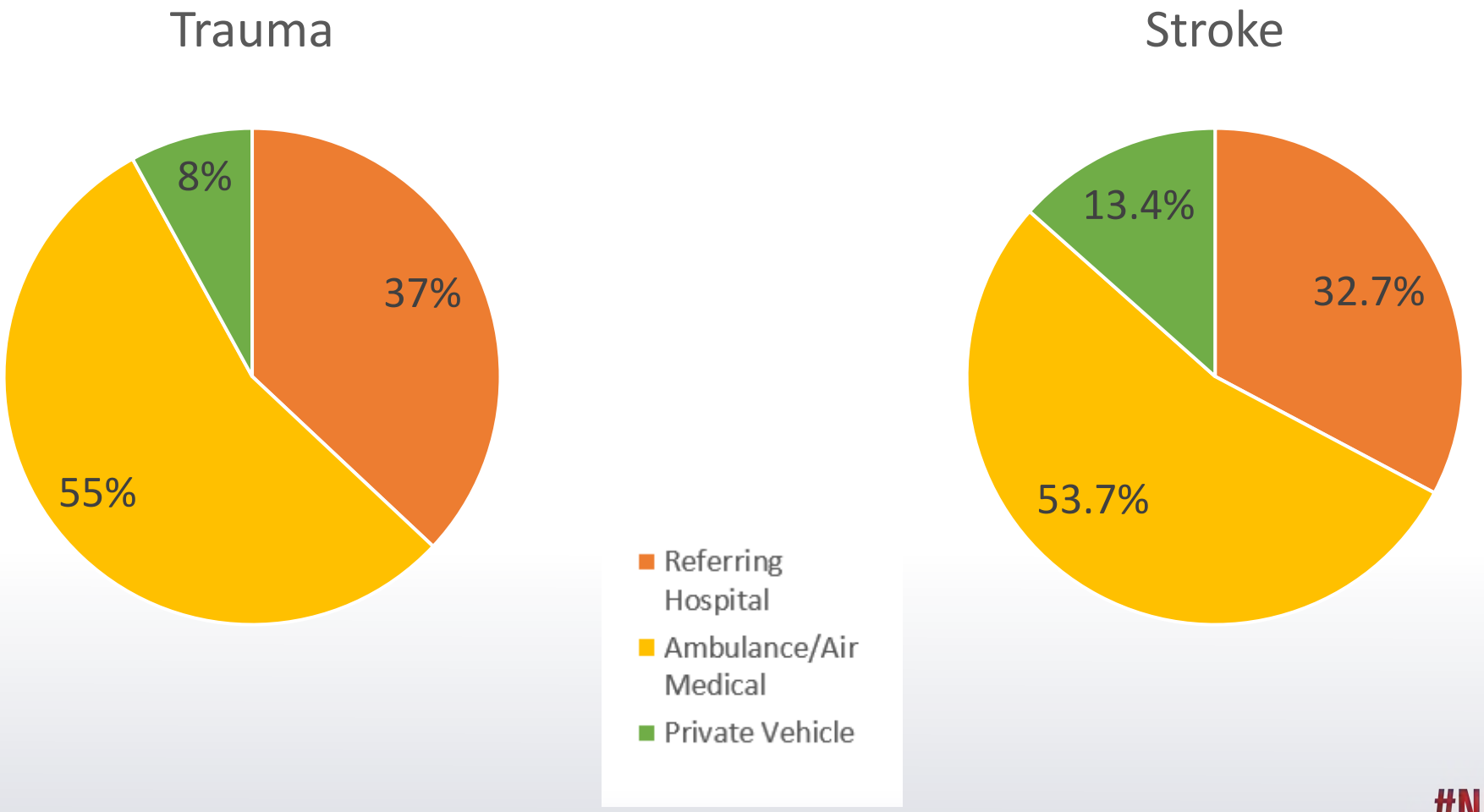
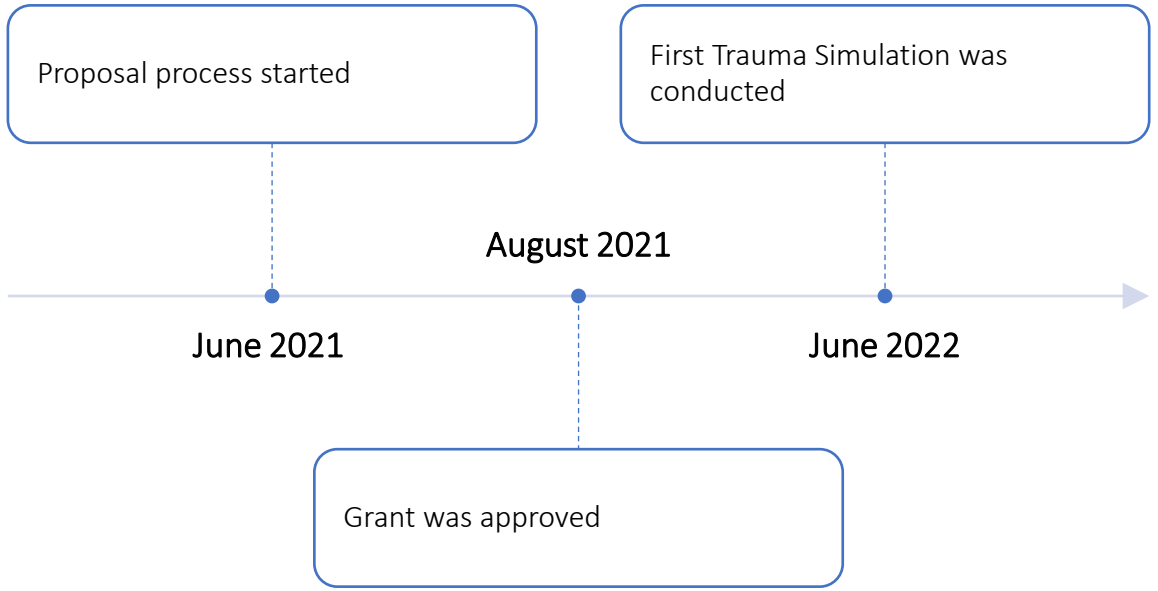
Stroke & Trauma Simulation

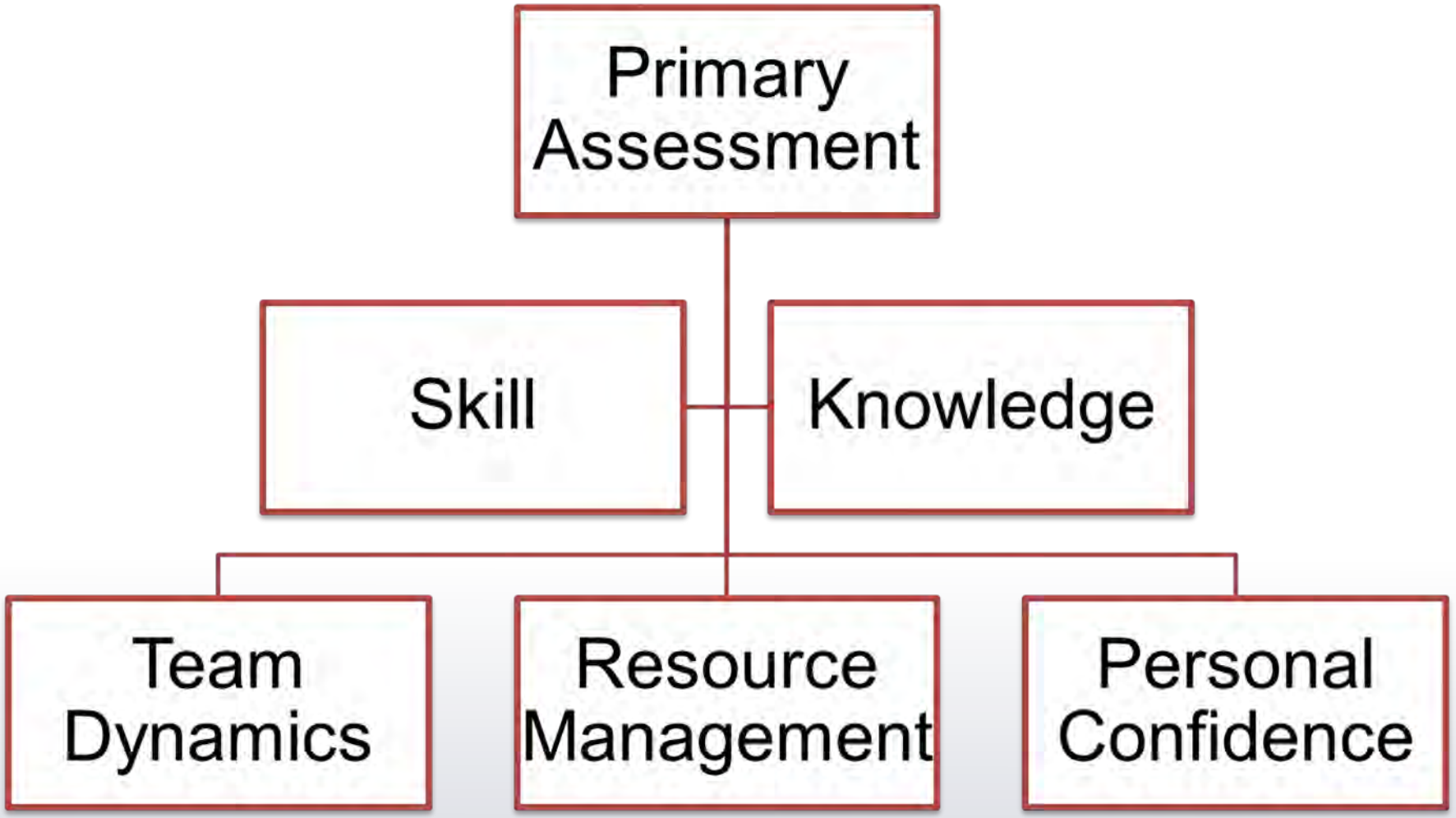


Stroke & Trauma Simulation



Our grant allowed us to receive 2 adult manikins, one of which is specially designed for trauma, and we received one pediatric manikin.

Stroke & Trauma Simulation



Stroke & Trauma – Incorporating Challenges

EMS
• Scene Safety • Weather • Geography • Bystanders • MCI • Availability of ambulances • Distance

Referring Hospitals
• Staffing – Shortages – Level of comfort • Availability of equipment – Blood – Imaging / Read Times – TNK/TPA – Thrombectomy • Transfer Capabilities – Location of helipad – EMS availability

Stroke & Trauma Simulation

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2022 Simulations

13 Simulations

Safety Spooktacular

189 Providers Educated (not including lectures)

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2023 Simulations

23 Simulations

Simulation Saturday

412 Providers Educated (not including lectures)

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Simulation Saturday

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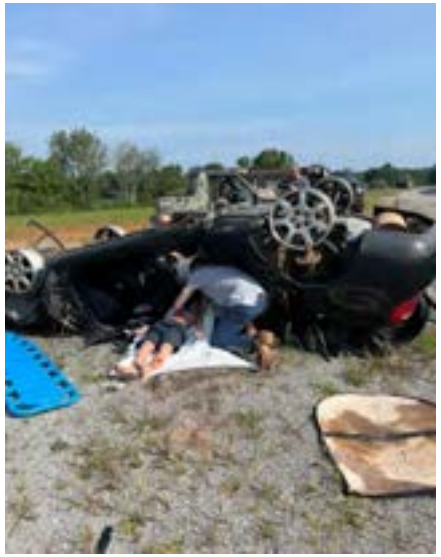
Simulation Saturday – Monroe County



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Simulation Saturday – WSCC

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Future Endeavors

- Pediatric and Trauma Simulations will continue across our region this year and into the coming years.
- UT Brain and Spine is utilizing the adult simulators to teach stroke education to EMS, Fire, Rescue, and Emergency Medicine Staff.
- At the end of 2024, UT Trauma Services and UT Regional Perinatal plan to hold simulations together to address obstetric trauma patients and imminent deliveries resulting from traumatic incidents.
- We plan to hold an EMS, Fire, Rescue Simulation Saturday in spring of 2025 with Roane State Community College.
- We plan to hold a nursing Simulation Saturday in the Fall of 2025 with Carson Newman University.

QUESTIONS?

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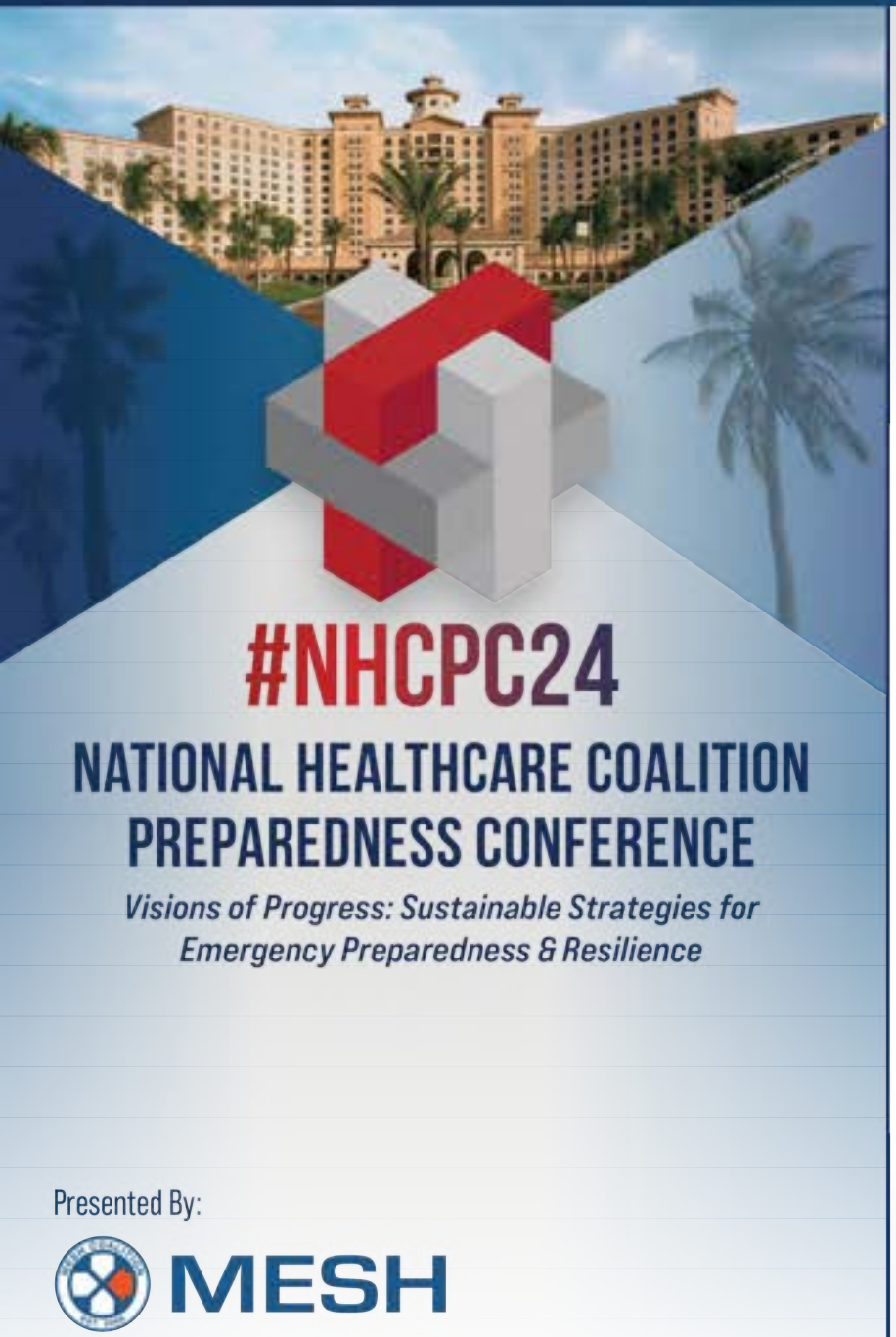

Get your Pediatric Readiness and Disaster Questions Answered!

Sarita Chung MD
Joyce Li MD, MPH
Massachusetts EMSC
Pediatric Pandemic Network
EMSC Innovation and Improvement Center

Faculty Disclosure Information

The Emergency Medical Services for Children Innovation and Improvement Center and Pediatric Pandemic Network is supported in part by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of grant awards 6 H33MCO6721 and U1IMC43532 with 0 percent financed with nongovernmental sources. ***The content presented here is that of the authors and does not necessarily represent the official views of, nor an endorsement by HRSA, HHS, or the U.S. Government.***

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

Objectives

- After attending this session, meeting participants will be able to:
  - Articulate pediatric preparedness and response strategies in different settings
  - Describe actions to prepare for emergencies/disasters that involve children

Session Description

- 5 topics to discuss key preparedness and response strategies:
  - Pediatric Readiness for Emergency Departments
  - Pediatric Surge for Hospitals
  - Family Reunification after Disasters
  - Pediatric Readiness for EMS Agencies
  - Pediatric Disaster Drills and Exercises

- Topic leaders will rotate through each table to discuss your questions on each topic.

Topics Leaders

Pediatric Everyday Readiness (ED)

Joyce Li

David Nelson

Pediatric Surge

Anna Lin

Christopher Newton

Family Reunification

Deanna Dahl-Grove

Maureen Luetje

Pediatric Everyday Readiness EMS

Jeff Luk

Regina Yaskey

Pediatric Drills and Exercise

Ron Ruffing

David McCarthy

Chris McCarthy

Table Discussion Instructions

Participants will spend about 10 minutes at each station with Topic Leader.

Once the 10 minutes is up, the Topic Leaders will move to next table (participants can remain where they are).

At the conclusion of the table topic/discussions, we will review available resources.

Resources

Pediatric Everyday Readiness in EDs	
EIIC ED Toolkit	• emscimprovement.center/domains/pediatric-readiness-project/readiness-toolkit/readiness-toolkit-checklist/
EIIC PEAKS	• emscimprovement.center/education-and-resources/peak/
New England Regional Behavioral Health Toolkit	• emscimprovement.center/state-organizations/new-england/new-england-behavioral-health-toolkit/
Simbox	• www.emergencysimbox.com

Resources

Pediatric Surge

EIIC Pediatric Disaster Checklist	• https://emscimprovement.center/domains/preparedness/disaster-plan-prepare/disaster-checklist/
WRAP-EM Pediatric Surge Playbook	• wrap-em.org/index.php/pediatric-surge-resources/94-pediatric-surge-playbook

Coming SOON! PPN Surge playbook

Resources

Family Reunification

AAP Family Reunification Toolkit	• downloads.aap.org/AAP/PDF/AAP-Reunification-Toolkit.pdf
Region V Family Reunification	• emscimprovement.center/domains/preparedness/asprcoe/region-v-for-kids/family-reunification/

Resources

Pediatric Everyday Readiness for EMS

EIIC	• Prehospital Pediatric Readiness Project • EIIC
American Academy of Pediatrics	• https://publications.aap.org/pediatrics/article/145/1/e20193308/36984/Pediatric-Readiness-in-Emergency-Medical-Services
NHTSA's office of EMS	• Home | EMS.gov

Resources

Exercises and Drills	
Homeland Security Exercise and Evaluation Program (HSEEP)	• www.fema.gov/emergency-managers/national-preparedness/exercises/hseep
FEMA Youtube HSEEP Training Videos playlist	• www.youtube.com/playlist?list=PL720Kw_OojlJRVI3gQiZzj2g72Ez8ISlA
The Needs of Children in Disaster Preparedness Exercises	• resources.pedspandemicnetwork.org/library/3975/addressing-the-needs-of-children-in-disaster-preparedness-exercises-2nd-ed-3975/
FEMA HSEEP Inclusion, Diversity, Equity and Accessibility in Exercises	• www.fema.gov/sites/default/files/documents/fema_inclusion-diversity-equity-accessibility-exercises.pdf

Resources

Exercises and Drills	
AAP Pediatric Tabletop Exercise Toolkit: Preparing for Disasters	• www.aap.org/en/patient-care/disasters-and-children/pediatric-tabletop-exercise-resource-kit/pediatric-tabletop-exercise-toolkit-preparing-for-disasters/
Pediatric Pandemic Network Tabletop Exercise Kit: Pediatric CBRNE Emergencies	• pedspandemicnetwork.org/our-work/enhance-your-preparedness-for-pediatric-cbrne-emergencies/
Pediatric Care Coordination Center: A Demonstration and Table Top Exercise	• emscimprovement.center/domains/preparedness/asprcoe/region-v-for-kids/exercises/exercise/

Questions?

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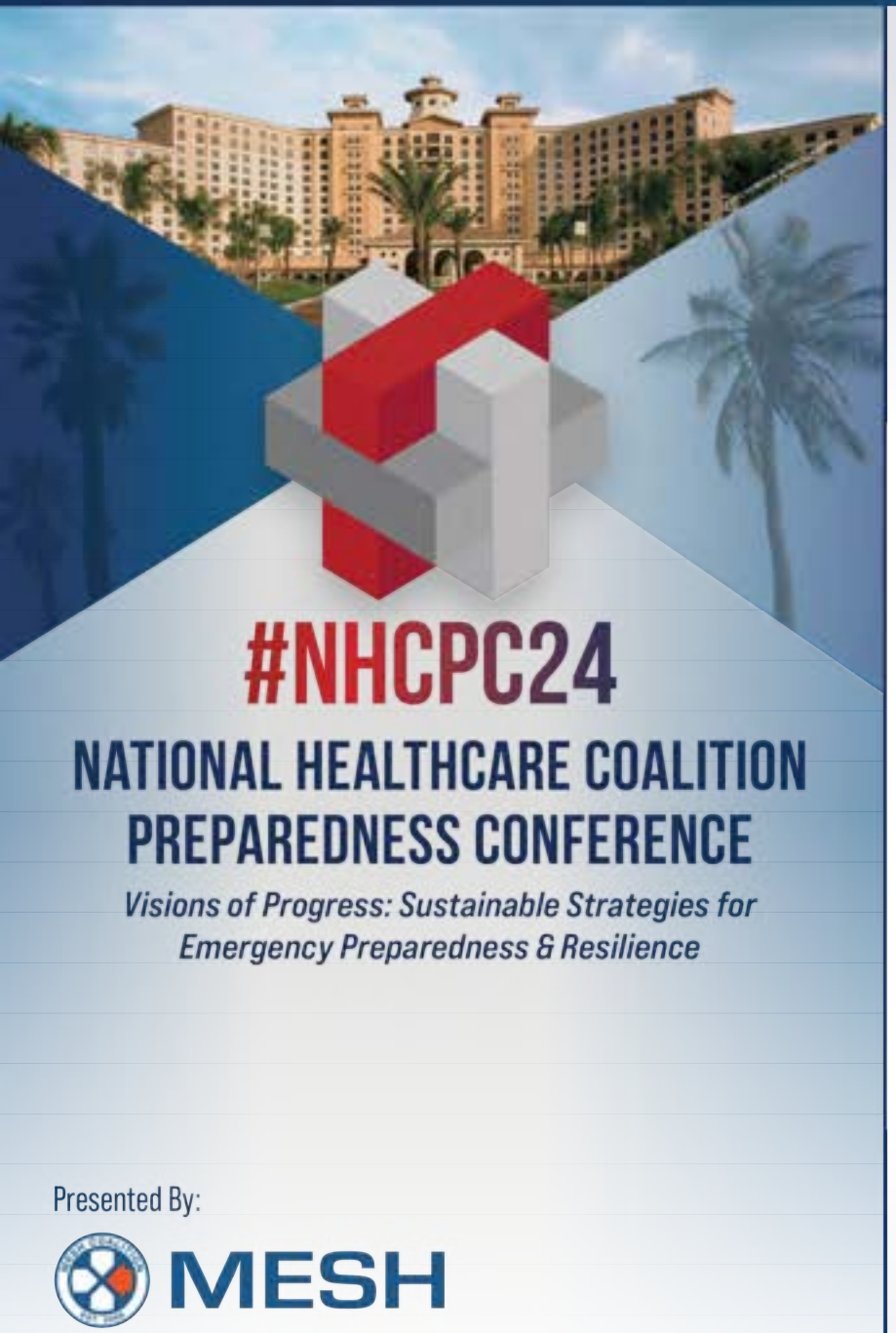

Little People in Big Disasters: Are You Prepared

Abby Bailey, MPA, NRP
Angela Kik, RN, BSN, CEN, EMT
Kenneth Kik, EMT-P

Disclosure – Pediatric Pandemic Network

- The Pediatric Pandemic Network is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as a part of cooperative agreements U1IMC43532 and U1IMC56925 with 0 percent financed with non-governmental sources. The content presented here is that of the speaker and does not necessarily represent the official views, nor an endorsement by HRSA, HHS or the U.S. government. For more information, visit HRSA.gov.

Objectives

- This session is intended to be a discussion, not just a lecture.
- Discuss importance of pediatric specific planning.
- Kentucky's Healthcare Coalitions and Pediatric Readiness.
- Overview of the Pediatric Pandemic Network (PPN).
- Overview of Kentucky's pediatric planning and training initiatives.
- Overview of the Pediatric Medical Operation Coordination Center (PMOCC).

Pediatric Plans, Planning, and Readiness

- Why do we need special plans and planning for pediatrics?
  - Many special considerations
  - Safety
  - Family Reunification
  - Right size equipment
  - Specialty transport (neonatal especially)
- What exactly is this “Pediatric” population we need to plan for?

What is a Pediatric Patient?

- When we're planning, this is a unique set of potential patients with very different needs:
  - Neonates (can be very scary)
  - Newborns (scary and cute)
  - 6 Months (sweet as can be)
  - Toddlers (on the move)
  - Youngsters (fun)
  - Tweens (attitude)
  - Teens (large size toddler)
  - And every kid in between!

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Pediatric Special Needs

- Other sub-sets that need special planning considerations, both in and out of hospital:
  - PICU and NICU patients.
  - Disabled or mobility issues.
  - Electrical dependent – Ventilators at home.
  - Complex medical condition(s) – medically fragile.
  - Traumatic Brain Injuries.
  - Autism and other special needs.
  - Many others…

Kentucky's Healthcare Coalitions (HCCs)

- One team concept.
  - Plan together.
  - Train together.
  - Exercise together.
  - Respond together.
    - When 1 HCC is in response,

      All are in response to support.

Kentucky HCC Plans and Exercises

- Leverage your resources – Find your champions!
- Healthcare Coalitions
  - Peds Specific Planning and Plans.
    - HCC Peds Medical Surge Annex updates.
    - Planning with EMS/Hospitals for peds inclusion.
    - Encouraging Peds Ready and PECs.
  - Peds in Exercises
    - Peds Medical Surge TTXs.
    - State-wide Peds TTX with HCCs
    - Inclusion in Medical Response Surge Exercise (MRSE).
    - Inclusion in other community-based exercises including FSEs.

PEDIATRIC PANDEMIC NETWORK

TEAM HPP
ESF-8
HEALTH & MEDICAL

Peds Equipment and Training

- Peds Equipment
  - Manikins for loan to HCC members.
    - Adult and Peds ALS manikins.
    - Rescue Randy and Rescue Jennifer manikins.
  - HandTevy & Broselow.
  - Rural hospital and EMS peds specific equipment.
    - Broselow Carts, ALS bags, and Teddy Bears.
  - Evacuation equipment for hospital NICUs/L&Ds.
- Peds Specific Training

Peds Training Program

- Peds Specific Training for Critical Access and Community Hospitals.
  - Partnerships with Kentucky (UK) and Norton's Children's Hospitals, HPP, EMS-C, and PPN.
    - Pediatric HAL® advanced pediatric patient simulator.
    - Capable of simulating lifelike emotions through dynamic facial expressions, movement, and speech.
    - Dynamic lung compliance with true ventilator support.
    - Real patient monitor support: SpO2, EKG, capnography, NIBP, live pacing, and defibrillation.
    - Emergency intervention: surgical airway, needle decompression, chest tube insertion.

Peds Training Program

- Trauma and Medical Scenario.
- Peds equipment scavenger hunt.
- Peds MCI TTX.
- Leave behind educational materials and scenarios to use for training.
- Expand to EMS in future.

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Abby Bailey, MPA, NRP

Pediatric Pandemic Network
Norton Children's Hub Manager
Trauma/Burn Domain Manager

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Pediatric Pandemic Network (PPN)

- Mission:
  - In collaboration with the nation's children's hospitals and their communities, the network will coordinate, prepare, and enable high-quality, equitable, research-based pediatric care in emergencies, disasters, and pandemics.
- Vision:
  - Improving health outcomes of children and the resiliency of children, families and communities impacted by emergencies, disasters, and pandemics.

Pediatric Pandemic Network (PPN)

- The PPN network works collaboratively with the Emergency Medical Services for Children Innovation and Improvement Center (EIIC) and 4 ASPR funded Pediatric Centers of Excellence.

Pediatric Pandemic Network (PPN)

Trauma Burns

CYSHCN

Reunification

Mental Health

Disaster Core

Health Equity

Community Engagement

Deployable Assets

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The Next Big Thing

- Disaster Response Collaborative
  - Aug 2024 – June 2026
  - Open to all Children's Hospitals
  - 4 focus areas:

For more information about the DRC.

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KY Pediatric Emergency Planning Coalition

Kentucky Public Health
Prevent. Promote. Protect.

Kentucky Hospital Association

TEAM HPP ESF-8 HEALTH & MEDICAL

Norton Children's Hospital

PIKEVILLE MEDICAL CENTER

EMSC KENTUCKY
EMERGENCY MEDICAL SERVICES FOR CHILDREN

Office for Children with Special Health Care Needs

UKHealthCare
Kentucky Children's Hospital

PEDIATRIC PANDEMIC NETWORK

Prepare Exercise Train EM

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Who needs to be at the planning table?

- Pediatric readiness champions
- Stakeholders
  - EMS-C
  - Associations
  - Emergency Management
  - Access and Functional Needs, Office of Children with Special Healthcare Needs
  - School RNs and Safety personnel
- Clinical experts
- C-Suite level decision makers, CMO, CEO, Program Managers, etc.

Our First Planning Meetings Dec 2023 & July 2024

Immediate Goals

- Introductions
  - Get to know each other.
- Conversations
  - Learning each others' roles.
- Review of current training and readiness initiatives
  - Breaking down silos.
- Ideas
  - Brainstorming and open discussions.

Future Goals & Planning

- Disaster Plan Revisions
  - Lessons learned – need updates.
- Pediatric MOCC development
  - Realized gap.
- Dedicated P-MOCC Coordinator / Pediatric Readiness Coordinator needed
  - Hired Angela in July!
- Training and exercise planning
  - Collaborative training and exercises.

Pediatric Hybrid TTX – July 16, 2024

- Hosted by PPN.
- Combination in-person and virtual.
- Test theory of a peds TTX that could be shared nation-wide.
- 132 participants.
  - Primarily Hospitals, EMS, Emergency Management, and Local Health Department.
- All 8 KY Healthcare Coalitions participated.
  - Many HCC members met in person within their region.
  - Zoom rooms utilized.
  - All 8 HCC completed individual AAR/IP.
  - Very positive feedback from HCCs
  - Sparked conversations about realized gaps in planning and training.

Angela Kik, RN, BSN, CEN, EMT

Pediatric Pandemic Network
Norton Children's Trauma/Burn Domain
Pediatric Medical Operations Center Coordinator

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Pediatric Medical Operations Coordination Center

- PMOCC Concept
  - MOCC planning is an ASPR driven HPP deliverable.
  - Proven concept in other states.
  - Kentucky developed a preliminary MOCC plan at the onset of COVID.
- Vision
  - PMOCC Coordinator (PPN funded position at Norton Children's)
  - Operationalize a PMOCC within ESF #8 ICS structure.
    - Supplements larger MOCC for peds specialty care.
  - Will assist coordination of pediatric transfers during surge events.
    - Load balancing to ensure right patient for right bed.

What is a PMOCC

PEDIATRIC MEDICAL OPERATIONS COORDINATION CENTER

A CRITICAL METHOD OF ENSURING THAT PEDIATRIC PATIENTS ARE LOAD BALANCED ACROSS THE STATE/REGION/HOSPITALS.

A PMOCC CAN BE USED DAILY AND/OR DURING PERIODS OF HIGH ADMISSIONS SUCH AS RESPIRATORY SEASON.

Load Balancing vs. Transfer Management

Load-Balancing = Moving patients from an overloaded hospital to less burdened facilities to distribute strain more equitably or to free up beds in a specialty center.

Transfer Management = Receive transfer requests and ensure the patients being cared for in a facility that does not provide the necessary services are prioritized and transfer arranged to a facility with the appropriate capacity and capabilities.

What a PMOCC is NOT

- A PMOCC is NOT:
  - A standard transfer center.
  - Will not replace or interfere with usual referral patterns.
  - Will not interfere with or discourage health systems from distributing patients, prioritizing beds, or transferring within their organization.

One Call System Concept

A PMOCC can benefit providers by providing a “one call” alternative to multiple phone calls to different hospitals and health care systems looking for a bed.

All hospitals must participate for this system to work.

Develop a dashboard that can be fed by a quick and easy-to-use survey. The dashboard will be used by an executive team who will be predominately answering the one-call system during a PMOCC activation.

PMOCC Attributes

- A central point of contact 24/7
- Current facility capacity and capability information (survey and dashboard)
- A mechanism for prioritizing patient transfers based on clinical information
- The ability to provide or connect to specialty consultation support – telemedicine
- The ability to function effectively across jurisdictional boundaries
- The ability to communicate and coordinate pre-hospital care with EMS – work with KBEMS

Medical Direction

- More to come….
- Provides care-in-place instructions when the patient will need continued care at the facility while awaiting transfer – could be telemedicine.
- Assist in developing policy and to oversee medical aspects of operation.
- Medical information will be needed to help prioritize patient movement and determine appropriate destinations.
- May need specialty providers to support the PMOCC based on the situation such as trauma and burn care specialists.

PMOCC Organization

Possible plan is to integrate the PMOCC into a major health care system referral center.

Hub and spoke type organization.

Utilize the major pediatric facilities in KY as the hubs and all other facilities with pediatric capabilities will become the spokes.	Virtual operations during most activations	Coordinate with HPP/KBEMS/SEOC/local EOC	Gain KHA and hospital C-Suite approval and support

Year One Activities

DEVELOP A PRELIMINARY PLAN FOR THE PMOCC WITH PPN HUB APPROVAL.

INVITE KEY PLAYERS TO THE TABLE TO FORM A WORKGROUP – KHA, HPP, KBEMS, NORTON CHILDREN'S, KENTUCKY CHILDREN'S.

VISIT WELL ORGANIZED AND ESTABLISHED MOCCS TO GAIN INSIGHT INTO ESTABLISHED BEST PRACTICES.

DASHBOARD DEVELOPMENT.

PROVIDE A WORKSHOP AND TTX TO TEST THE INITIAL PMOCC PLAN TO TEST THE SYSTEM.

SPEAK AT A TOWNHALL MEETING THAT KHA DOES MONTHLY. THIS IS ATTENDED BY HOSPITAL C-SUITE AND PROVIDERS.

Year Two Activities

- Actively utilize the pediatric dashboard to monitor bed status and engage HPP staff to provide encouragement to all hospital facilities to participate.
- Do a state-wide functional exercise to test the system and make appropriate changes.
- The goal is to have the PMOCC fully functional after the exercise.
- Encourage the workgroup to stay engaged throughout this process.

PMOCC Coordinator

- Working with the PPN, HPP, and Peds Stakeholder will:
  - Operationalize a PMOCC through planning, MOUs, & exercises.
  - Liaison between PPN and HPP/HCCs.
  - Liaison between Children's Hospitals and Front-Line Acute Care Hospitals.
  - Will help coordinate pediatric transfers during surge events.
  - Will assist with pediatric education and training.
  - Will assist with pediatric surge and readiness planning.
  - Liaison between EMS agencies and hospitals for PPN.
  - A bunch of other tasks…

In Conclusion
What does all this really mean?

- Hospitals, EMS, and EM should have a comprehensive disaster plan, inclusive of pediatrics.
- Regional coordinated disaster training.
- Integration with Healthcare Coalitions, local/state/regional disaster committees, the Pediatric Pandemic Network, local stakeholders
- QI projects involving pediatric systems of care

Questions?

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Your Challenge…

What is your state/community doing for pediatric planning?

Can you do more?
How can we help?

Contact Information

For more information or to get involved with PPN contact:

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502-657-9607
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For more information about the PMOCC contact:

Angela Kik, RN, BSN, CEN, EMT
859-583-6168
amkik001@louisville.edu

For everything else and all things KY HPP contact:

Kenneth Kik, EMT-P
502-234-8392
Kenneth.kik@ky.gov

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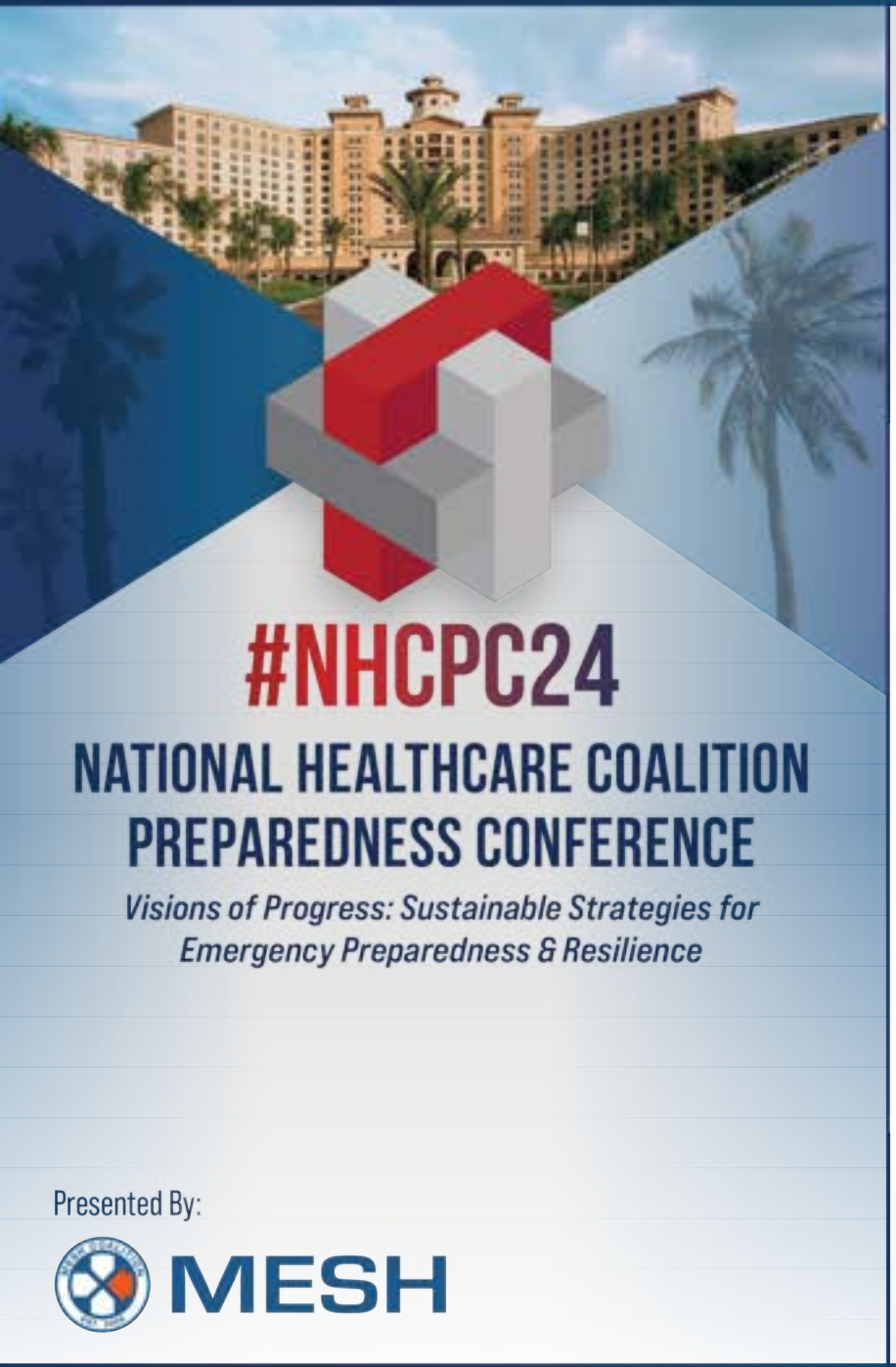


Pediatrics and High Consequence Infectious Diseases (HCID): Challenges and Opportunities

Tress Goodwin, MD
Assistant Medical Director for Emergency Preparedness
Regional Emerging Special Pathogen Treatment Center R3—Director of Pediatrics
Associate Professor of Emergency Medicine and Pediatrics
George Washington University School of Medicine and Health Sciences
Children's National Hospital

Amyna Husain, DO MPH
Assistant Director for Emergency Preparedness
Regional Emerging Special Pathogen Treatment Center R3—Associated Director of Pediatrics
Associate Professor of Emergency Medicine and Pediatrics
George Washington University School of Medicine and Health Sciences
Children's National Hospital

Agenda

- Define HCID
- NETEC/NSPS Overview
- Prepare your STAFF for Peds Patients
- Prepare your STUFF for Peds
- Q&A

What is an HCID? The ”general” definition:

- **Severe or life-threatening**: They have a high mortality rate and may cause serious illness.
- **Highly contagious**: These diseases are often easily spread from person to person through respiratory droplets, bodily fluids, or other means.
- **Difficult to treat or lack effective treatments**: HCIDs may have limited or no treatment options, making control and containment critical.
- **Potential to cause an outbreak**: They can cause significant public health impacts if they spread in communities, hospitals, or other settings.

Evolution of the NSPS

The NSPS evolved from an earlier tiered system – the Regional Ebola Treatment Network (RETN) – which was stood up in response to the 2014 Ebola outbreak. Since then, the NSPS has grown and shrunk based on active emergency responses, but current efforts aim to make the NSPS more sustainable.

Ebola Outbreak

COVID-19 Pandemic

2014 | **2015** | **2018** | **2020** | **2021** | **2022**

In response to Ebola, ASPR established the **RETN** with 10 RESPTCs and established the National Ebola Special Pathogen Training and Education Center **(NETEC).**

In addition to the RESPTCs, **SPTCs and Assessment Centers** were established to provide more access to care facilities.

In response to COVID-19, ASPR **rebranded** the RETN to become the NSPS, and expanded its mandate to include all special pathogens.

NETEC rebranded in 2019 to the National Emerging Special Pathogen Training and Education Center, inclusive of all special pathogens.

To expand the tiered system for special pathogen response, ASPR tasked NETEC with developing the **NSPS Strategy** for a more coordinated system.

NETEC continues to lead the **NSPS Strategy Implementation** which includes developing the NSPS System of Care minimum capabilities for each Level and providing coordination support.

NSPS Overview

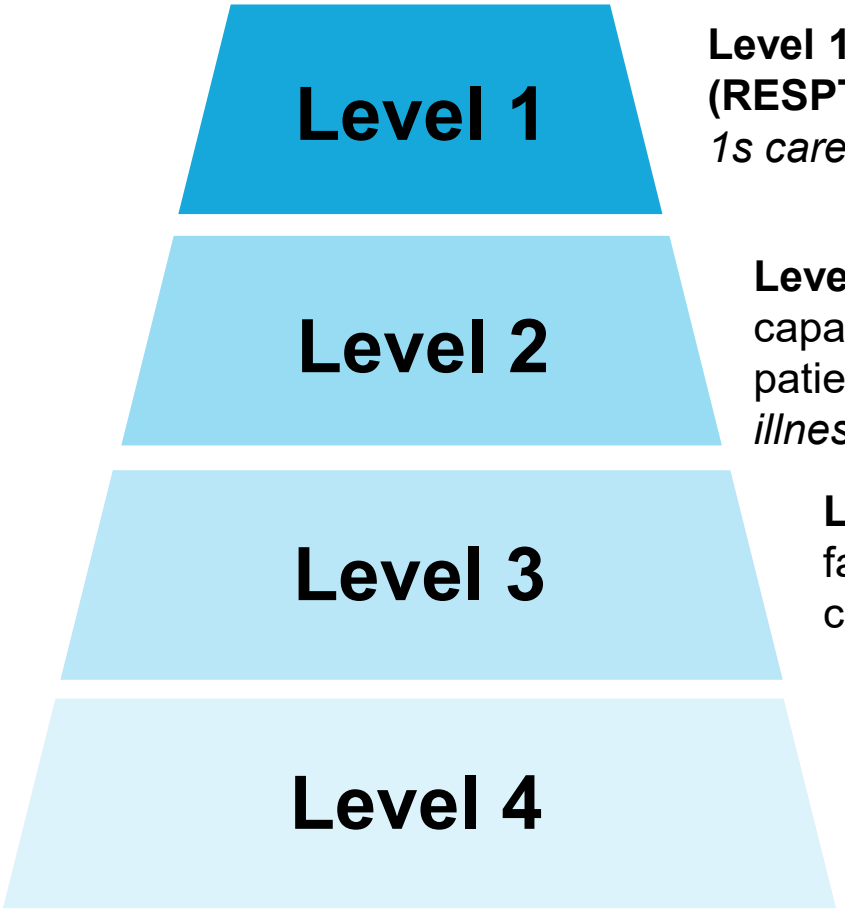
What is the NSPS?

The National Special Pathogen System (NSPS) is a tiered System of Care with four facility levels (e.g., Level 1, Level 2, Level 3, Level 4) that have increasing capabilities to care for suspected or confirmed patients with High Consequence Infectious Diseases (HCIDs).

NETEC SERVES AS THE COORDINATING BODY OF THE NSPS

H.R.2617 - Consolidated Appropriations Act, 2023 ***"directs NETEC to serve as the NSPS coordinating body… [responsible for] establishing a robust NSPS and integrating NSPS with other health care delivery systems of care for emergencies..."***

The Tiered System of Care



Level 1 facilities, or Regional Emerging Special Pathogen Treatment Centers (RESPTCs), are regional resources hubs which provide highly specialized care. *Level 1s care for patients for their duration of illness.*

Level 2 facilities, or Special Pathogen Treatment Centers (SPTCs), have the capacity to deliver specialized care to clusters of patients and serve as primary patient care delivery centers. *Level 2s can care for patients for their duration of illness.*

Level 3 facilities, or Assessment Centers, are widely accessible care delivery facilities, able to conduct limited basic laboratory testing, stabilize patients, and coordinate rapid patient transfer. *Level 3s can care for patients for 12-36 hours.*

Level 4 facilities, or All Other Healthcare Facilities, can identify, isolate, inform, & initiate stabilizing medical care; protect staff; and arrange timely patient transport to minimize impact to normal facility operations.

Components of the NSPS

The NSPS is a **hub-and-spoke model** where ‘hubs’ (Level 1s) provide supporting centralized services to the ‘spokes’ within their domains (Level 2-4s)

NETEC	*Is the NSPS Coordinating Body and provides resources to NSPS members*
Level 1 RESPTCs	*Provides regional coordination and outreach, resources, & highly specialized care*
Level 2 SPTCs	*Provides highly specialized care for the duration of illness*
Levels 3 and 4	*Provides short term safe care and/or coordinates rapid patient transfer to a Level 1 or 2*

EMS connects facilities throughout the NSPS.

Regional Emerging Special Pathogens Treatment Centers

1. **CT, ME, MA, NH, RI, VT**
   Massachusetts General Hospital
2. **NJ, NY, PR, VI**
   NYC Health + Hospitals / Bellevue
3. **DC, DE, MD, PA, VA, WV**
   Johns Hopkins Hospital
   MedStar Washington Hospital Center
4. **AL, FL, GA, KY, MS, NC, SC, TN**
   Emory University Hospital
   UNC Health
5. **IL, IN, MI, MN, OH, WI**
   University of Minnesota Medical Center
   CoreWell Health
6. **AR, LA, NM, OK, TX**
   University of Texas Medical Branch
7. **IA, KS, MO, NE**
   University of Nebraska Medical Center/Nebraska Medicine
8. **CO, MT, ND, SD, UT, WY**
   Denver Health & Hospital Authority
9. **AZ, CA, HI, NV, AS, MP, FM, GU, MH, PW**
   Cedars-Sinai Medical Center
10. **AK, ID, OR, WA**
    Providence Sacred Heart Medical Center & Children's Hospital

Locate your regional contacts, including physician, nursing, pediatric, and operations leadership, as well as local and state health partners.

Components of the NSPS

The NSPS is made up of a four-level tiered System of Care

Level 1 – *Regional emerging special pathogen treatment center and hub*

Level 2 – *Special pathogen treatment center*

Level 3 – *Assessment center*

Level 4 – *All healthcare facilities*

The NSPS Coordinating Body is led by NETEC and provides *services to* NSPS facilities such as…

Education & Training

Consultation and Assessment

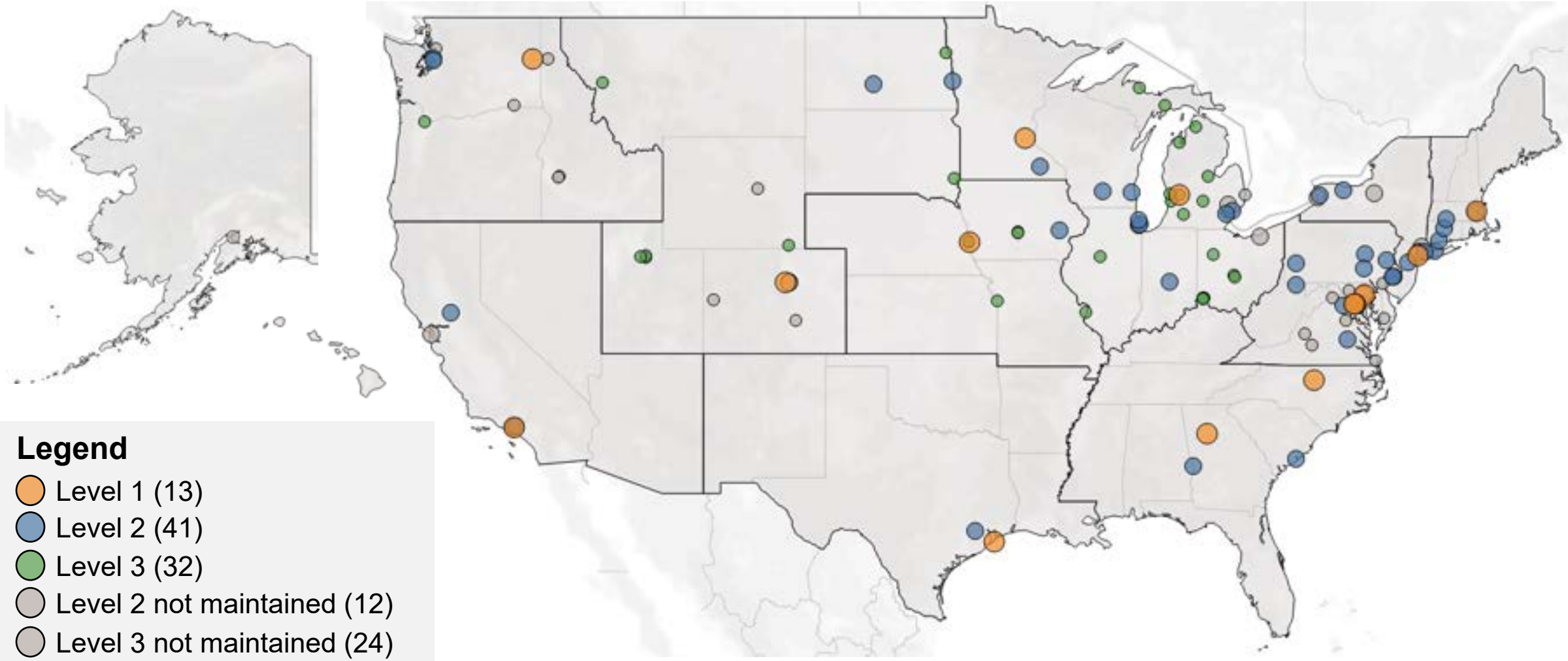
Special Pathogen Research Network (SPRN)

International Partnerships & Programs

Additional partners, such as EMS and public health, are essential for the coordination of the System

Draft System of Care Current State Map

Please note that data collection is in progress and not all regions are fully visualized



High-Level Minimum Capabilities Comparison

The table is intended to provide a high-level sample of quantifiable difference across levels and does not include all minimum capabilities.

Capabilities	Level 1	Level 2	Level 3
Care Duration	Duration of illness	Duration of illness	12-36 Hours
Capacity for VHF, airborne	2 VHFs 10 airborne	1-2 VHFs 4 airborne	1+ isolation space
PPE Supply	2 VHF cases for at least 7 days onsite (with plans to support 21 days of care)	1-2 VHF cases for at least 7 days onsite (with plans to support 21 days of care)	3 VHF cases for 12-36 hours (before resupply)
Exercises	Quarterly	At least twice annually	At least once annually for mystery patient exercise
PPE Training	Quarterly	At least 2x annually	At least 1x annually
Skills Training	Quarterly	At least annually	--
Lab Testing Ability	Clinical lab testing	Clinical lab testing	Point-of-care onsite clinical lab testing

PREPARE YOUR STAFF FOR PEDS

CHiRP

CHILDREN'S HIGH RISK PATHOGENS TEAM

Children's National®

CHiRP

CHILDREN'S HIGH RISK PATHOGENS TEAM

Full Scale Exercise
07/31/2024

Full Scale Exercise: July 2024

CHiRP

CHILDREN'S HIGH RISK PATHOGENS TEAM

Child Life Patient Care

Full Scale Exercise: July 2024

Communication

Intra-organizational Communication

Whom

Department of Health –local, state

NSPS sites

Health Care Coalitions

Critical Access sites

EMS / transport

CDC

What

Testing coordination

Transportation Coordination

Public messaging

Family monitoring

SME support

Disposition process

Inter – organization Communication

Organization huddles

Include all necessary stakeholders

Written communication plan

Incorporate family needs

Routine and daily huddles

Medical care status

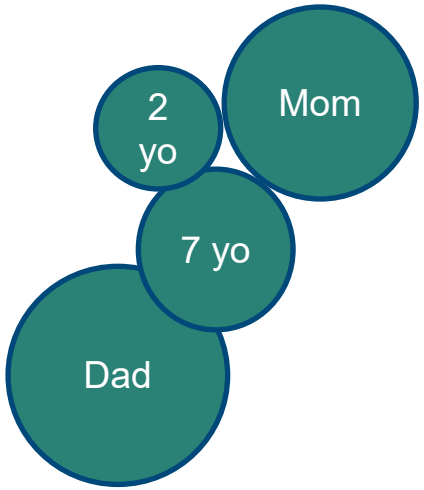
Staff structure

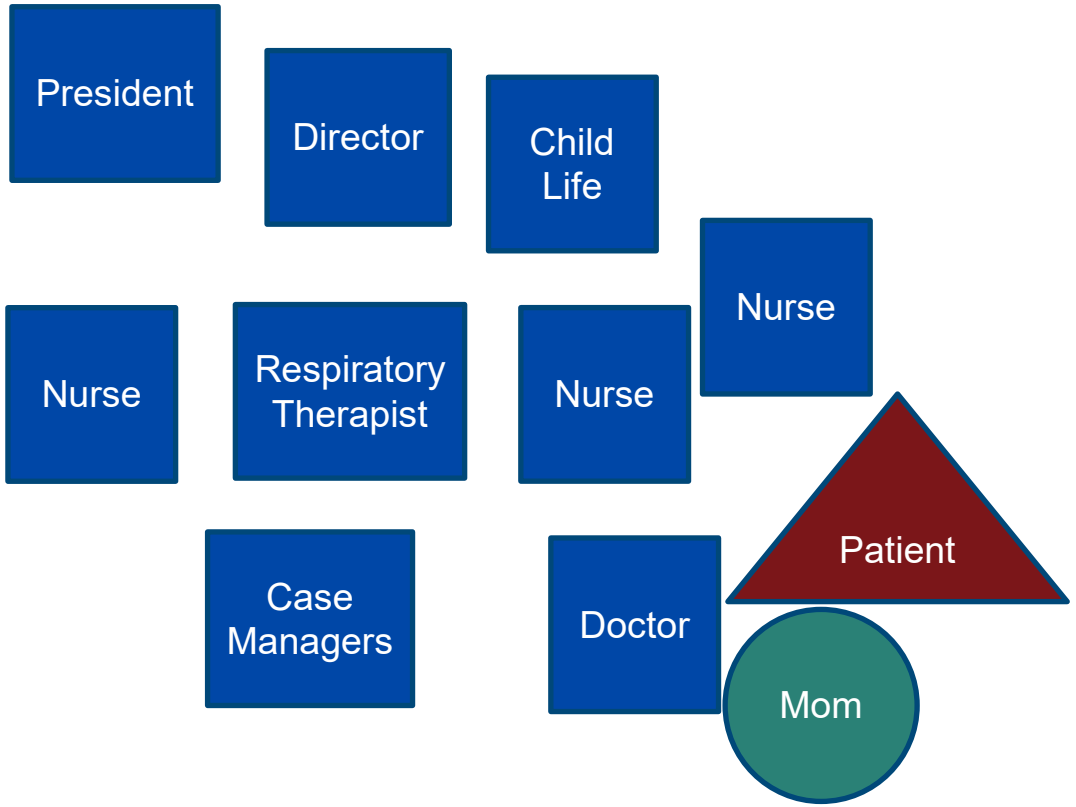
Communication lead

Patient isolation

Communication with child's family

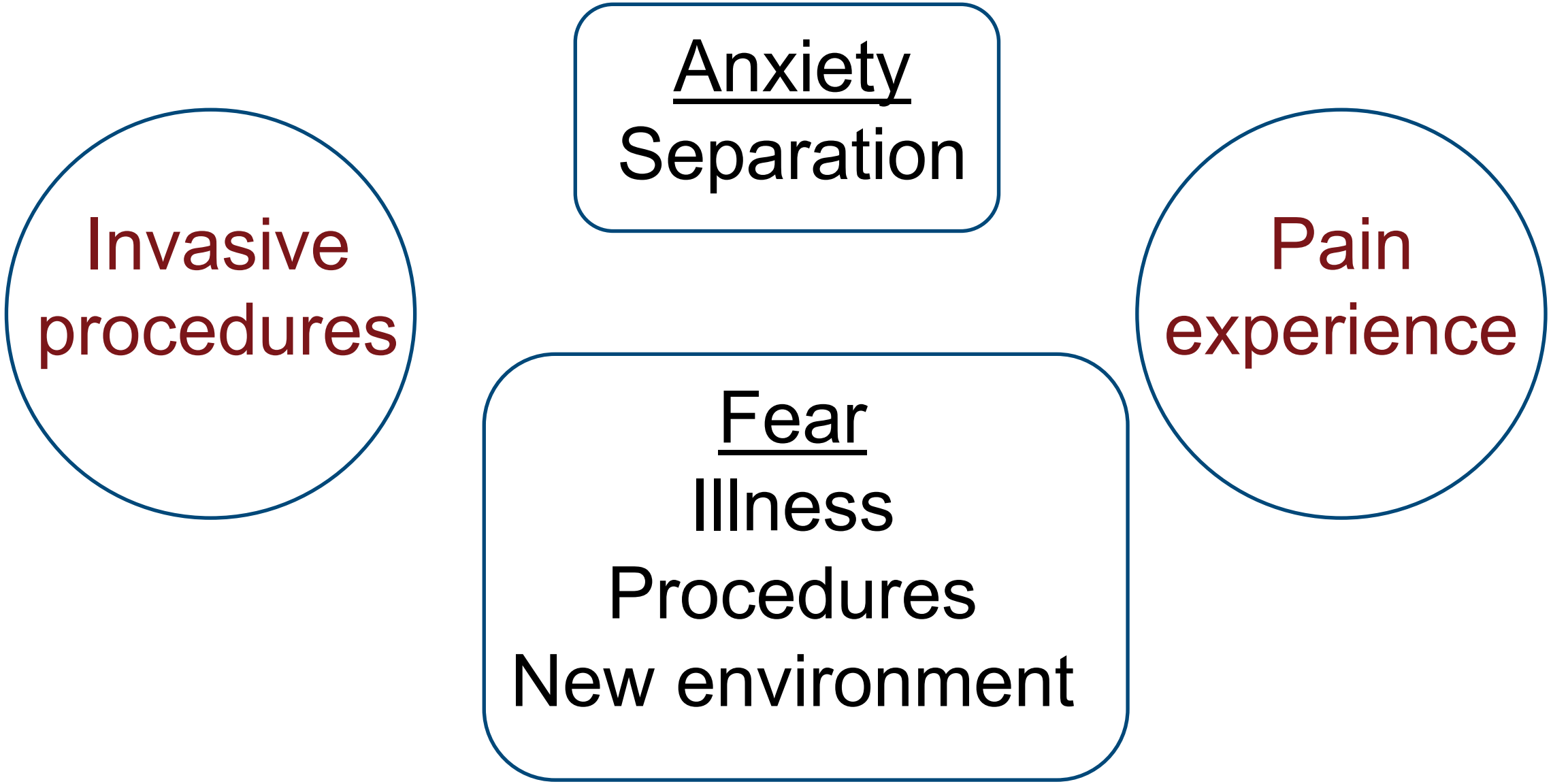
- Unified communication
- Identify 1-2 roles to consistently communicate with the family
- Sign out communication
- Avoid conflicting information
- Clear, transparent, simple


2
yo
Mom
7 yo
Dad


President
Director
Child
Life
Nurse
Nurse
Respiratory
Therapist
Nurse
Patient
Case
Managers
Doctor
Mom

Pediatric Stage Considerations

Overarching principles



Infants and Toddlers

Total dependence

- Feeding
- Diaper changes
- Communication
- Emotional support
- Comfort items

Separation Anxiety

- 8 months to 3 years
- Cries, screams, clings to parent, tantrums
- Verbally and physically aggressive
- Physically tries to escape/find parent
- Sad, withdrawn, regress, refuse to eat/drink

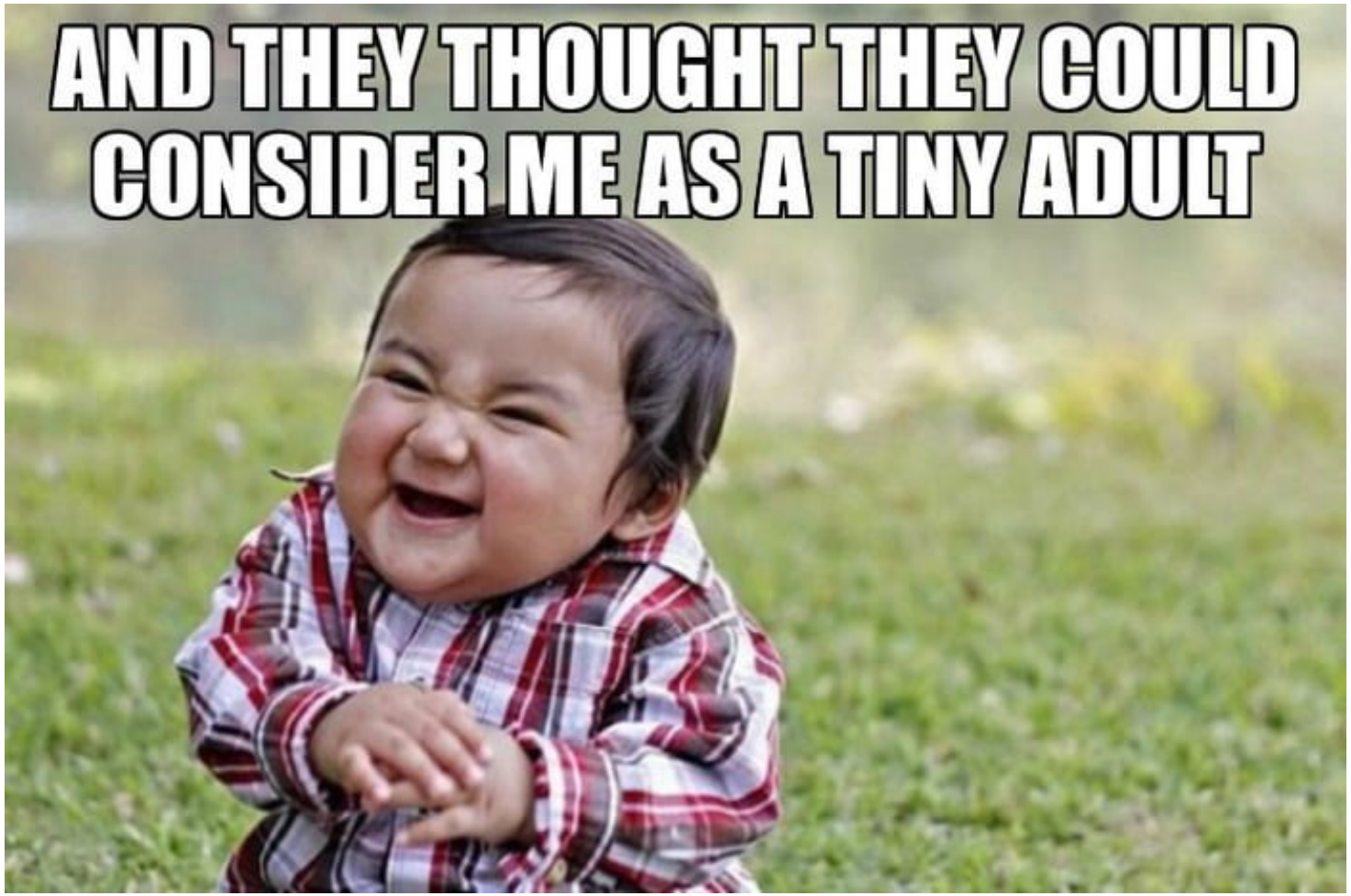
Pre and School Age

- Somatization of emotions
- Sleep disturbance
- Guilt and shame
- Need to understand why
- Autonomy, choices, participation
- Beware the passive child
- Comfort items
- Ipad with movies/games/education

Teens

- Reliance on friends
- Social media
- Fear appearance and stigma
- “Act” Brave
- Prior trauma or medical events
- Self autonomy
- education/movies/games on ipad

Prepare Your Stuff for Pediatrics


AND THEY THOUGHT THEY COULD
CONSIDER ME AS A TINY ADULT

Remote Preparation and Support for Procedures

- Working with in room staff to facilitate education, preparation and support to patient about procedures and plan of care

- Real medical materials for specific procedures
  - Active ownership, participation and cooperation in process
  - Dispel misconceptions and fears
  - Familiarization with new materials

Enhancing Family Presence in Healthcare

Utilizing Technology for Connection

Technology can play a vital role in keeping families connected. Most children are familiar with using phones, tablets, or computers for video chats, making it easier for them to communicate with loved ones in healthcare settings.

Encouraging Physical Presence

Whenever possible, aim for physical presence of family members. This could be through a unit window or by training parents on how to use personal protective equipment (PPE) to safely visit their loved ones.

Normalization Strategies for Prolonged Isolation

Work with patient and family to support individualized needs to make space more comfortable and engaging for patient.

- Favorite toys
- iPad/taplet for diversional normalization, distraction during procedures and communication
- Room Decorations
- Designated play area (non-procedural space) in room
- School engagement

Working with family to maintain connection with parents, siblings and peers.

- Supporting sibling education about medical process
- Protected family time
- Setting daily routine

https://www.youtube.com/watch?v=LBrp2esVPfs

If time…

Questions and Answers

Take Home Considerations for Pediatrics

1. Work closely with your support team:
    1. Child life/Social work
2. Prepare patient tablets/iPads with individual with preloaded content and headphones
3. Children will have fear and anxiety that present differently at different ages
4. Have a communication plan that employs risk communication
5. Educational content ready to go
6. Once admitted need to consider strategies for prolonged isolation

- QR code for Timmy’s Ambulance Ride

Pediatric Disaster Preparedness Ambassadors

A Resource for HCC's

Brent D. Kaziny, MD, MA, FAAP

Medical Director of Emergency Management, Texas Children's Hospital

Vice Chair, Council on Children and Disasters, American Academy of Pediatrics

American Academy of Pediatrics

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AAP Disaster Ambassadors

Program Overview

The Why Behind the Program

Why Pediatric Preparedness?

- Critical to ensure the unique needs of infants, children and adolescents are addressed in all phases of disaster preparedness, planning, response, recovery and mitigation efforts.
- Children are more vulnerable than adults in disasters and public health emergency situations, and they have specific needs for customized disaster planning.
- Pediatricians and others who may care for children have key roles to play in disaster preparedness, response and recovery to ensure these unique needs are met. The AAP provides resources for pediatricians and others to take strategic actions (personally and professionally) to support planning, provide services and play a leadership role in disasters and public health emergencies.

AAP Disaster Ambassadors

Program Overview

The Why Behind the Program

Why AAP Chapters?

- Provide education, support and resources to pediatric health professionals, families and communities in their regions.
- Uniquely positioned for local engagement with a broad reach due to extensive network of pediatric health professionals and community partners engaged
- Opportunity for program growth and expansion due to established

66 Chapters in Total

- **One in every state (with the exception of California which has 4 and New York which has 3)**
- **2 uniformed services chapters**
- **Washington DC chapter**
- **Puerto Rico chapter**
- **7 Canada Chapters**
- **Organized into 10 Districts (shown in map)**

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AAP Disaster Ambassadors

Program Overview

The Why Behind the Program

Why Pediatric Disaster Ambassadors?

- LOCAL: Experience the impacts of disaster along with the communities they serve; awareness of local area needs, impacts and resources
- EXPERTISE: Pediatric subject matter expert to ensure the unique needs of pediatrics are addressed in Disaster Preparedness Efforts
- TRUST: Pediatricians recognized as a trusted source of health information; A trusted voice representing pediatric disaster needs at the local level
- COLLABORATION: Avenue for connection and collaboration with health partners across the region as well as with other AAP Disaster Ambassadors, AAP National networks and AAP health partners across the country.

AAP Disaster Ambassadors

Program Overview

Participants

- 16 participating AAP Chapter and Ambassador Teams

Alabama; Arizona; California-1; California-3; District of Columbia; Florida; Hawaii; Idaho; Louisiana; Maine; Maryland; Ohio; Oregon; Pennsylvania; Puerto Rico; Texas

AAP Disaster Ambassadors

Program Overview

Ambassador Program Goals

- Strengthen relationships between chapter and community partners.
- Work with state Health Care Coalition(s) to support pediatrician/pediatric expert involvement.
- Work with PHEP program to reach diverse populations.
- Identify 1 threat/potential disaster that is relevant to your chapter and develop a plan with activities that can be implemented during the project year to improve readiness for this threat.
- Participate in at least 2 professional development opportunities throughout the project (eg, webinar, conference session) related to pediatric disaster preparedness.
- Provide training or present content on pediatric disaster preparedness during at least 1 event during the project (can be local, with the chapter, state, national, etc).

AAP Disaster Ambassadors

Program Overview

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AAP Disaster Ambassadors

Program Overview

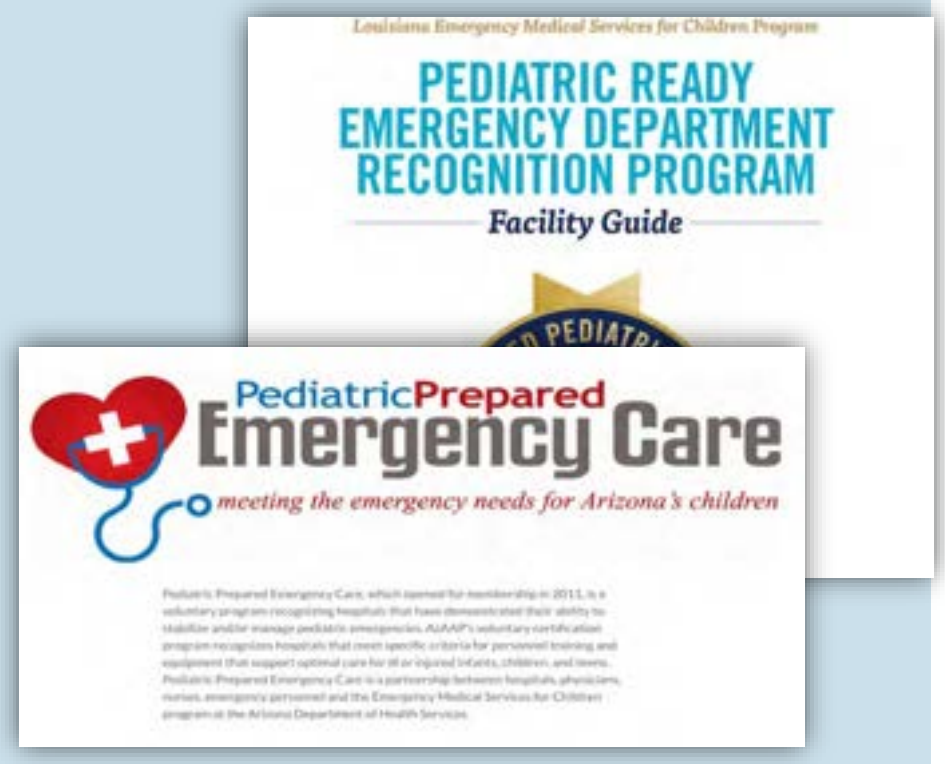
Targeted Initiatives

Hospital Based Initiatives	Chapter Focus Area	Deliverable	Links
Arizona	Pediatric Prepared Emergency Care(PPEC)/Surge	Webinar/Education; PPEC Evaluation	https://azaap.org/ppec
Louisiana	Hospital Preparedness	EMS for Children Recognitions Program/Education	https://www.laaap.org/disasterprep/
Maine	Hospital Preparedness/Pediatric Emergency Care Coordinator (PECC)	Maine Always Ready for Children (MARC)/Education	https://www.maineaap.org/providers/topic-resources/disaster-preparedness-er
Puerto Rico	PED Ready ER/Pediatric Emergency Care Coordinator (PECC)	Webinar/Curriculum development/translation of materials/Education	https://www.praap.org/preparados-ante-posibles-desastres/

Hospital Based: Hospital Focused Initiatives

PEC Initiatives and HCC's

Partnership Successes



Maine

- Collaboration with EMS-C on the Maine Always Ready for Children Program (MARC)
- Our EMS-C collaboration working on the Maine Always Ready for Children Program (MARC) continued to make substantial gains. We increased from roughly 74% of hospitals having identified a Pediatric
- Emergency Care Coordinator (PECC) in December 2023 to over 90% having identified a PECC. We continued to support multiple hospitals with the engagement/survey completion process.
- Additionally, we welcomed one new hospital at the Innovator level recognition for MARC.
- This will have an additive effect, as part of the commitment hospitals make when they engage at the Innovator level they help other hospitals meet their pediatric preparedness goals.
- The most important lesson in general is that there are a lot of potential partnerships out there, and the more we connect with them, the more efficient we can be as we will not duplicate their efforts.

Community Based Initiatives	Disaster Focus Area	Deliverables	Resource Links
Alabama	Wind/Weather Event	Tabletop/Education Event	Disaster Preparedness Resources for Chapter Members — Alabama Chapter of the American Academy of Pediatrics (alaap.org)
CA-1	Climate Disaster	Needs Assessment/Train the Trainer Program	https://aapca1.org/issue/disaster-preparedness/
CA-3	Pediatrician and Community Preparedness	Newsletter/Tabletop Exercise	https://aapca3.org/disaster-preparedness/
DC	Disaster Education	Survey on Disaster Education ; Worked with PPN in development of Podcast Series	https://www.aapdc.org/disaster/ ; https://pedspandemicnetwork.org/ready-prep-go/
Florida	Children and Youth with Special Health Care Needs (CYSHCN); Community Preparedness	PSA/Resource Guide/Initiation of Environmental Threats Committee	https://www.fcaap.org/posts/news/disaster-preparedness-psa/ : https://www.fcaap.org/posts/news/disaster-prep-guide/
Hawaii	Community Preparedness	Contact information database; Tabletop Exercises/Education Events	https://www.aaphawaii.org/maui-resources

Community Initiatives and HCC's

Partnership Successes

Hawaii

- Development of Contact information database for use in emergencies. Database instrumental for connection post Maui wildfires
- Meetings held through project brought together varying partners across the state which enabled networking of health partners on each island, as some clinicians are often working in silos
- Learned community partners were very interested and supportive of the clinicians being involved in disaster preparedness. Including the Department of Health, Department of Education, non-profit organizations, and hospitals.
- Presented to the pediatric residents on 7/10/24 on Children in Disaster and Lessons Learned from the Maui Fires.
- Presented to both the national Medicaid Medical Directors Network (MMDN) and the National Association of Medicaid Directors NAMD) which led to a follow up meeting with CMS Region IX Chief Medical Officer. We started some ongoing dialogue in terms of how Medicaid can help in disasters and how we can think of children from a systems perspective.
- Participation fostered connection, support and resource sharing with other Disaster Ambassadors during response and recovery for the Maui Wild fires

Washington DC

- Ambassadors are part of Children's National Safety and Emergency Management Team and serves as the Assistant Medical Director for Emergency Preparedness.
- Existing partnerships and collaborations with DC Health and DC Hospitals Association. Often participating in city-wide trainings, drills, and exercises involving multiple departments.
- Development and implementation of Survey to identify top disaster concerns of local pediatricians and the most preferred ways of learning about disaster preparedness and resources
- Understanding where pediatricians turn for routine information and during a crisis is important for future community challenges. Working with the DC government and other regional emergency response organizations, we will need to factor in federal as well as local responses.
- Team focused on identifying potential threats/disasters of top concern to local pediatricians which helped to understand factors that will play a role in additional educational and planning efforts such as
  - Top concerns of local pediatricians (Perceived Threats): Hurricane; Flood; Mass shooting
  - Most preferred ways of learning about disaster preparedness and resources available: Newsletters/feeds; Health System/Employer; Blogs

Community Based Initiatives	Disaster Focus Area	Deliverables	Resource Links
Idaho	Family Reunification/Community Preparedness	Family Reunification Toolkit/Education Events and Partnering on initiatives to improve communication during a disaster	Disaster Preparedness & Responses || Idaho Chapter of the American Academy of Pediatrics (idahoaap.org)
Maryland	Disaster Education/Community Preparedness	Education/Survey	https://cri-datacap.org/surveys/?s=FCDMJTTN4XD4X4JA ; *Currently working on a chapter disaster repository site
Ohio	Children and Youth with Special Healthcare Needs (CYSHCN)/Pediatrician and Community Preparedness	Pediatric preparedness deliverables added for the state/Table top Exercise/Webinar	https://ohioaap.org/disaster-preparedness https://ohioaap.org/check-your-mailbox-for-the-spring-2024-issue-of-ohio-pediatrics
Oregon	Pediatric Clinic Preparedness	Webinar/MOC IV Initiative	Oregon Chapter Disaster Preparedness MOC-IV Support Documents ; https://www.ohsu.edu/occyshn/hero-kids-registry ; Pediatric Disaster Preparedness – Are You Ready? Webinar
PA	Children and Youth with Special Healthcare Needs/Community Preparedness	Education/FireSafety Infographic/Trainings	Pediatric Medical Training Sessions - Oregon Pediatric Society
Texas	Extreme Weather	Webinar/Education Events	https://txpeds.org/tps/Web/Practice-Patient-Care/disaster-prep-resources.aspx

Community Based: Practitioner, Family and Community Focused Initiatives

Community Initiatives and HCC's

Partnership Successes

Ohio

- Able to make connections with some HCCs in Ohio, but not all.
- Most engagement and collaboration with Central Ohio Trauma System (COTS)
- Due to recent disasters in Ohio involving children, increased recognition on the importance of disaster preparedness planning for children.
- Push to incorporate children's needs as deliverables for some HCCs and some conversations starting to emerge regarding a pediatric disaster task force for the area.

Maryland

- Most beneficial Ambassador activity was connecting with the state PHEP manager
- Through PHEP the Ambassador was provided the opportunity to engage in meetings and table top expercises and represent pediatric needs
- Collaborations resulted in connection to other disaster preparedness partners across the state including HCC's.
- Virtual pediatric preparedness meetings/educational events with HCC's in the state

AAP Disaster Ambassador Program: Identified Values, Efforts and Needs

Phase 2

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

AAP Disaster Ambassador Program

Value of Program Participation

- Connections with community health partners
- Identification of gaps/barriers in pediatric disaster preparedness
- Impact of a designated pediatric disaster ambassador
- Ability to connect, learn and share with others in the program
- Increased interest and engagement from chapter members around disaster preparedness with an ambassador program in place
- Ability to utilize chapter channels to delineate information/resources
- Engagement of local pediatricians, medical homes and community health partners through chapter channels
- Ability to utilize chapters established networks to connect with other programs and pediatric subject matter experts
- Connection with partners generating additional opportunities for collaborations and enhancement of pediatric disaster preparedness.

AAP Disaster Ambassador Program:

Identified Benefits to Local and State Preparedness through program participation:

Idaho

- The most beneficial activity for our work was the relationship between our chapter and various state and community partners.

Oregon

- It was beneficial to have a designated AAP Disaster Ambassador recognized at the state and national level. This facilitated better engagement when interacting with emergency management partners outside of the public health/medical emergency services function. We have seen an increased recognition of the importance of pediatric specific preparedness.

Hawaii

- Bringing together funded chapters and their projects has been invaluable. Knowing what other states have worked on and are working on, and networking with other states has been a major asset of being part of this network. The national AAP should continue these efforts.

AAP Disaster Ambassador Program:

Identified Benefits to Local and State Preparedness through program participation:

Arizona	• "We have found that working with the AAP Pediatric Disaster Preparedness Program has been an invaluable resource and overall support to our Arizona chapter in the area of pediatric preparedness"
California1	• Our Chapter was able to connect us with some other subject matter experts, also working with climate related disasters, which has proved helpful.
California 3	• Our most beneficial activities include utilizing the AAP Chapter 3 monthly newsletter to reach out and inform regional pediatric primary care providers on local disaster training, exercises and regional disaster protocols.

AAP Disaster Ambassador Program

Identified Areas of Focus for Continued Efforts

- Infants, children and youth with special health care needs
- Mental health impacts
- Rural and underserved areas
- Environmental/Weather
- Member education at AAP chapter conferences
- Disaster needs assessments for health practitioners and partners
- Hospital preparedness
- Identifying and tailoring content/education initiatives to the needs of local health practitioners
- Improving communication
- Expanding and continuing engagement and collaboration with families and health partners

AAP Disaster Ambassador Program

Ongoing Efforts:

Alabama	• I would ensure that a pediatric disaster topic was included during at least one of our two chapter CME meetings every year.
Ohio	• We found our approaches to be very successful the past few months and would want to continue with this work. We would continue our outreach with other HCC's and government officials to help establish more representation for youth with special health care needs (CYSHCN).
Pennsylvania	• Given more time and funding, we would want to explore the opportunities to work with other key partners and family organizations in our state focused on this important work.
Texas	• Moving forward, we aim to gauge interest among members for specific topics such as children with special healthcare needs and vaccine storage/transport. This feedback will guide us in tailoring future education initiatives and resource development for key partners and family organizations in our state focused on this important work.
Maryland	• The medical home or primary care is the biggest gap. Getting pediatricians more involved in the community disaster preparedness plans including for the county and school districts is very important.

AAP Disaster Ambassador Program

Identified Needs Post Program Participation

- Centralized accessible repository of pediatric disaster preparedness tools/resources
- Need for materials to be readily accessible in multiple languages
- Need for centralized pediatric disaster preparedness efforts coordinated both nationally and locally
- Resources and Education for AAP Chapters to support member, family and community preparedness response and recovery efforts
- Need for accessible/effective avenue for communication and resource sharing between ambassadors outside of cadenced meetings
- Continued project funding and longer grant cycles to maintain momentum, improve/sustain collaborations, and build upon initiated efforts.

AAP Disaster Ambassador Program

Identified Program Needs:

Florida	• Future iterations of this project would benefit from a longer grant period and increased funding, which would allow for increased collaboration, the creation of more resources, and the involvement of more members.
Puerto Rico	• Increase the availability of Spanish documents regarding Peds Readiness and PECC education, as well as Spanish material for training health care professionals and the community.
Maine	• We have begun building partnerships with the intent of continuing them long term, but doing so feels a bit seat-of-the-pants given that we end each cycle not knowing if there will even be an opportunity to renew for another 6 month period
District of Colombia	• A library of educational materials or completed presentations with links to authors could greatly expedite the delivery of additional resources to the regions.
Louisiana	• There is a need for ambassador mentorships to increase the awareness of pediatric disaster preparedness and ways to get involved across Louisiana's communities.

AAP Disaster Ambassador Program

Program Highlights and Future Goals

American Academy of Pediatrics
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AAP Disaster Ambassador Program Highlights:

Chapter Engagement

- AAP Chapters uniquely positioned for national program with broad local reach
- AAP Chapters provide a trusted source of health information for health partners, families and communities
- AAP Chapters extensive established pediatric networks provide opportunities for connection, collaboration and program expansion
- Ambassadors participating in the program have identified significant benefits in disaster efforts through chapter partnerships including; increased engagement; expanded networks and broader reach

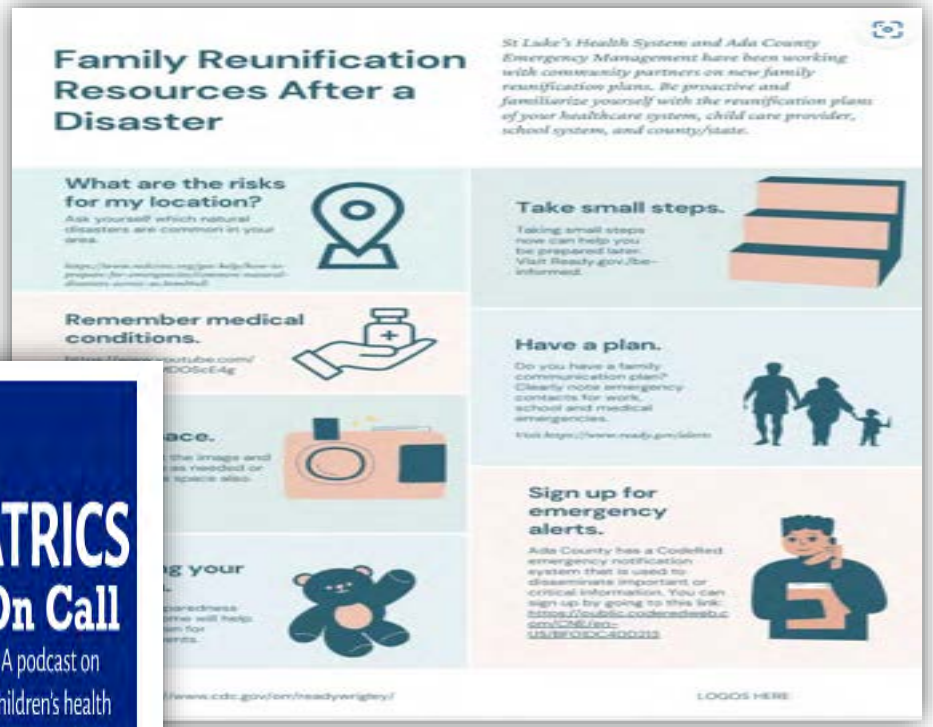
AAP Disaster Ambassador Program Highlights: Targeted Initiatives

Florida: PSA Campaign

Washington DC Disaster Survey

Ohio: Fire Safety Educational Material for Children and youth with Special Healthcare Needs

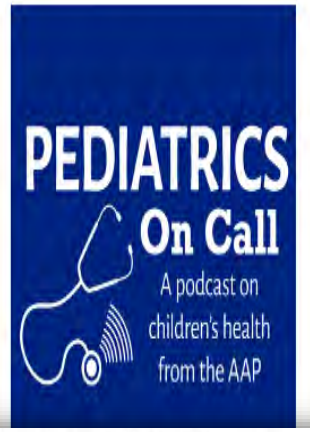
AAP Disaster Ambassador Program Highlights: Targeted Initiatives



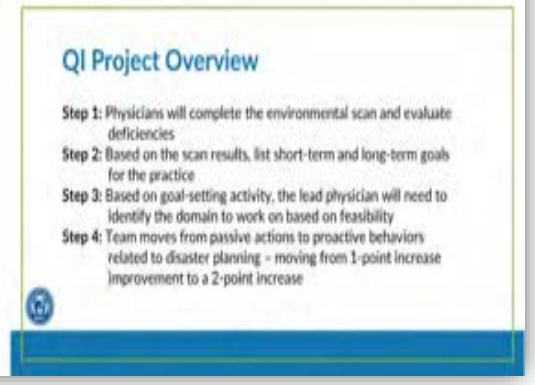
Pediatrics Research Roundup, Surviving and Preparing for Disasters – Episode 194

03/05/2024

In this episode Rachel Moon, MD, FAAP, associate editor of digital media for the journal Pediatrics, shares a research roundup from the March issue. Hosts David Hill, MD, FAAP, and Joanna Parga-Belinkie, MD, FAAP, also talk to Felicitas Livaudais, MD, FAAP, and Cindy Calderon, MD, FAAP, about surviving disasters and learning how to prepare for the future.



Phase 2 Updates: *AAP Oregon Pediatric Society's* Six-month QI and Learning Community, MOC-IV project. Kick-off session occurred on May 21, entitled *Preparing Your Clinic for a Natural Disaster*. The structure of the QI project is fashioned after the one used for Texas Childrens, with options for improvement across seven domains of preparedness.



AAP Disaster Ambassador Program Highlights: Responses to Ongoing Participation

We would absolutely love to keep going and would love the support of the AAP.
-Maine

YES!! The PA AAP would very much welcome the opportunity to continue this work in an ongoing way!
-Pennsylvania

Yes please. We would like to grow our Bay Area climate disaster program which we will be teaching to Spanish speaking immigrant youth and families.
--California-1

Hawaii would love to continue to participate in the AAP Pediatric Disaster Preparedness Program.
-Hawaii

Yes, Oregon would be very eager to participate in an ongoing AAP Pediatric Disaster Preparedness program, especially if there was chapter funding!
-Oregon

We have found that working with the AAP Pediatric Disaster Preparedness Program has been an invaluable resource and overall support to our Arizona chapter in the area of pediatric preparedness. We would love to figure out how to continue participating in the program in an ongoing way.
- Arizona

Yes the ambassador and chapter want to continue the pediatric disaster preparedness efforts. Louisiana's chapter would love to co-execute/implement the Hospital Recognition Program that is developed by the EMSC program.
-Louisiana

Disaster Ambassador Program

AAP National Goals:

- Continued participation of all current teams
- Continued funding to sustain current efforts
- Increased funding to expand current initiatives
- Increased funding periods to continue progress and maintain momentum
- Expansion of program at local and national level
- Expansion of AAP Disaster Preparedness Ambassador Program to every AAP chapter
- Establishment of AAP's National Pediatric Disaster Champion Network. Providing a centralized resource/tool repository, enhanced communication channels and expanded collaboration abilities. Driven locally, supported nationally building a foundation of pediatric disaster readiness.

AAP Disaster Ambassador Program:

Ambassador "Dream" Project Goals

A dream project would be a large-scale tabletop exercise focused on disaster preparedness for both pediatric and maternal patients. I could envision a multi-day facilitated exercise involving G7 leadership, academic physicians, community leadership, etc.
-Alabama

we would love to be able to provide free board books or similar educational resources on disaster preparedness to pediatrician's offices
-Ohio

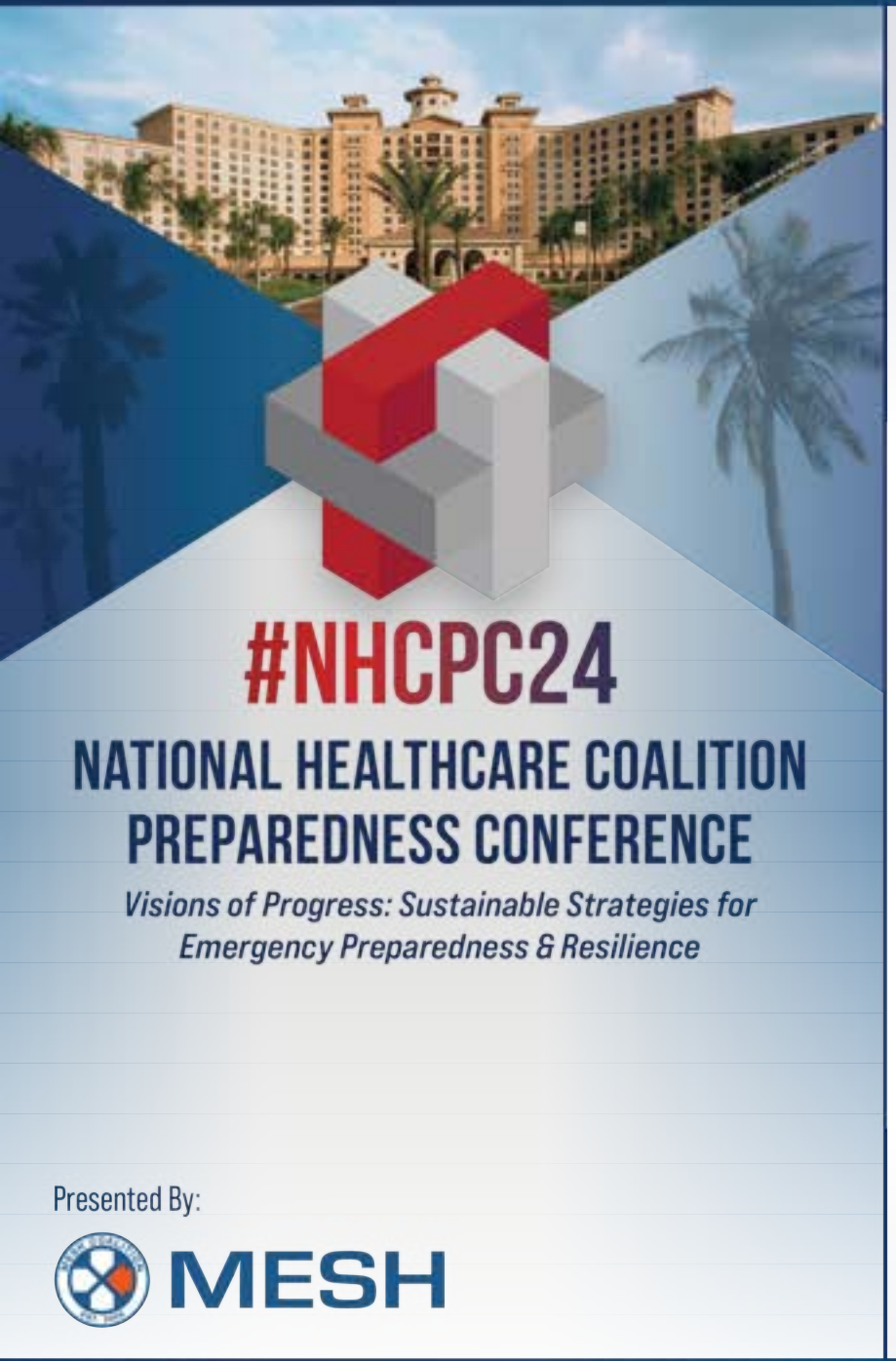
Developing a Spanish curriculum for conferences and educational materials to support the improvement of ped readiness in PR and Spanish speaking areas.
-Puerto Rico

Our "dream" project would be to establish a Maine Center for Pediatric Disaster Preparedness that would continue and build upon the work we have already begun, but continue year in and year out. It feels great to even be dreaming of such a project—this wouldn't be happening without the AAP Disaster Preparedness Ambassador Program!
-Maine

The ambassador's dream project would be for our team to organize quarterly meetings with all the Arizona hospital pediatric care coordinators to discuss topics related to pediatric preparedness, assist the PPEC program in knowing who to reach out to with program participation, and help the PCC and their associated facilities know about and navigate the PPEC approval process.
- Arizona

Working with families to do tabletop exercises, resource dissemination and further education to do the education informed by the stakeholder needs would be wonderful for our members.
-Pennsylvania

Case Scenario



SERFing the Quake Wave: Saving Kids When the Ground Gives Way

Lessons from A Multi-State SERF

Patricia Frost RN, PHN, PNP
Vice Chair National Pediatric Disaster Coalition

Disclosures

- SERF National Oversight and Planning Committee Member
- PPN and Region V for Kids Subject Matter Consultant

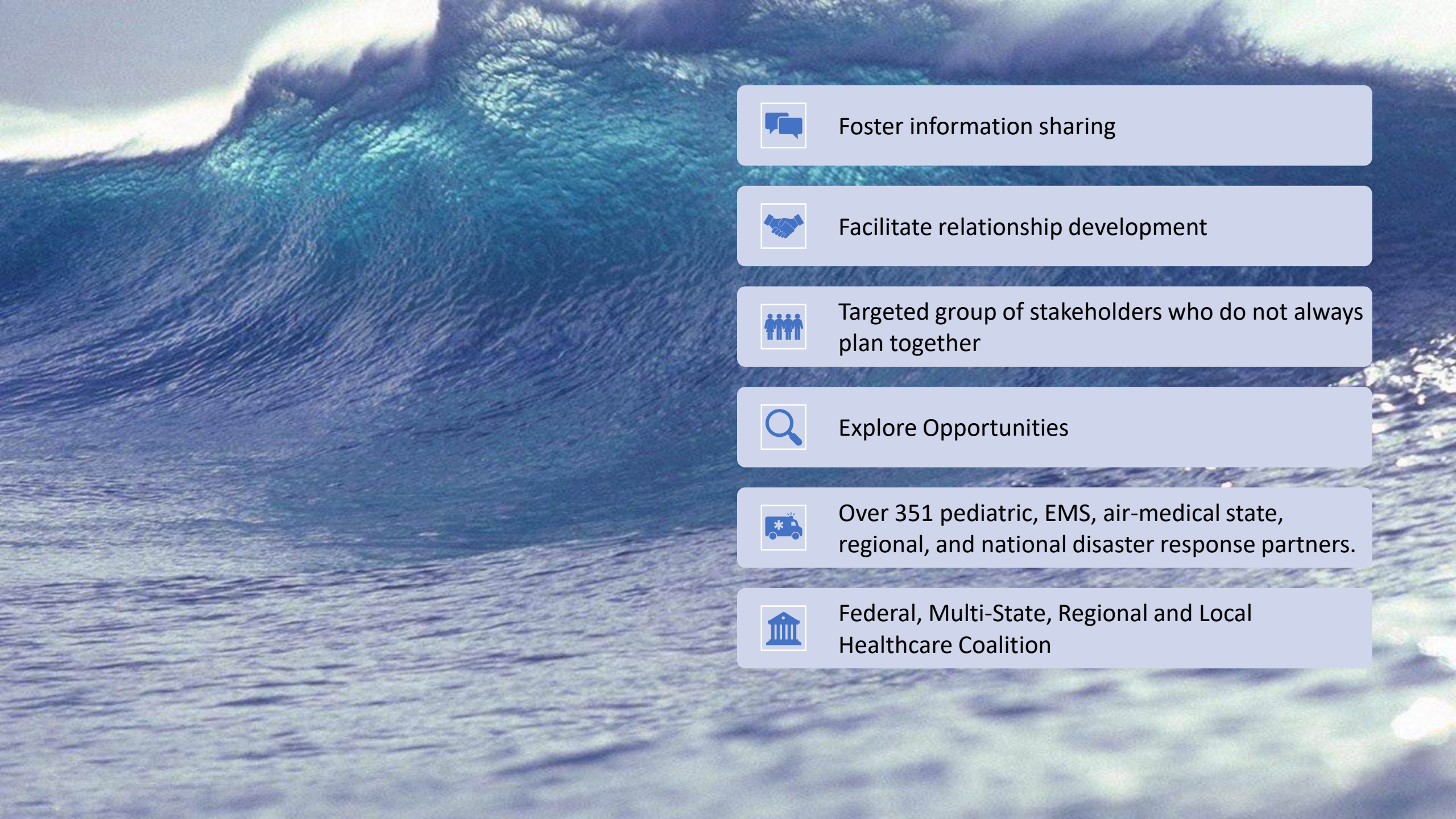
- This presentation does not represent official views of the state, federal or grant SERF participants.

Learning Objectives

Describe the current practices and lessons learned associated with hospital evacuations involving regional pediatric hospitals across multi-state urban and rural sectors.

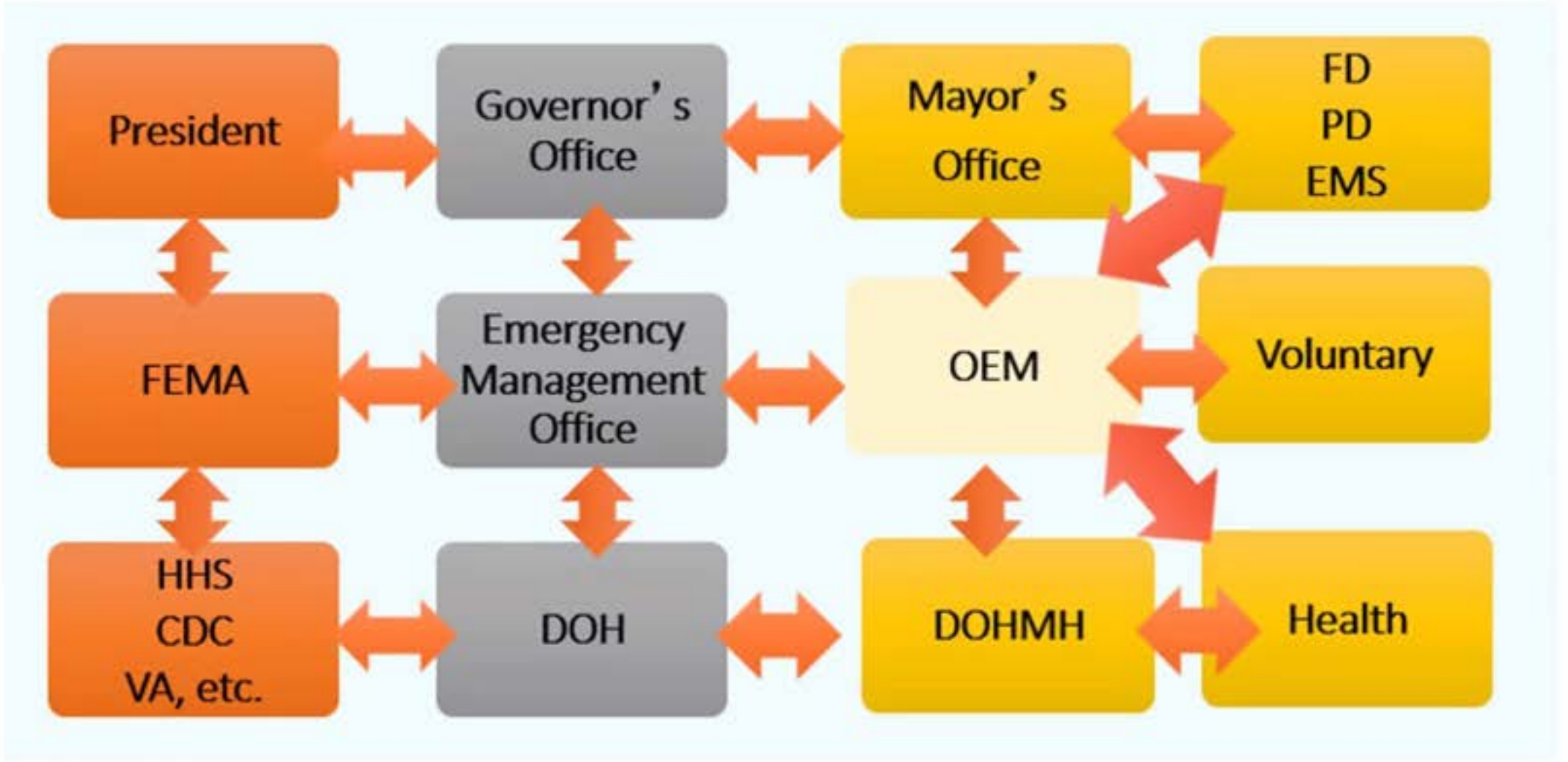
Discuss three major pain points associated with the mass evacuation of specialty hospitals and their alternatives in catastrophic events.

Discuss how facilitated Significant Event Readiness Forums can advance community planning for pediatric disaster responses.



- Foster information sharing
- Facilitate relationship development
- Targeted group of stakeholders who do not always plan together
- Explore Opportunities
- Over 351 pediatric, EMS, air-medical state, regional, and national disaster response partners.
- Federal, Multi-State, Regional and Local Healthcare Coalition

Federal, State, and Local Coordination in Disasters

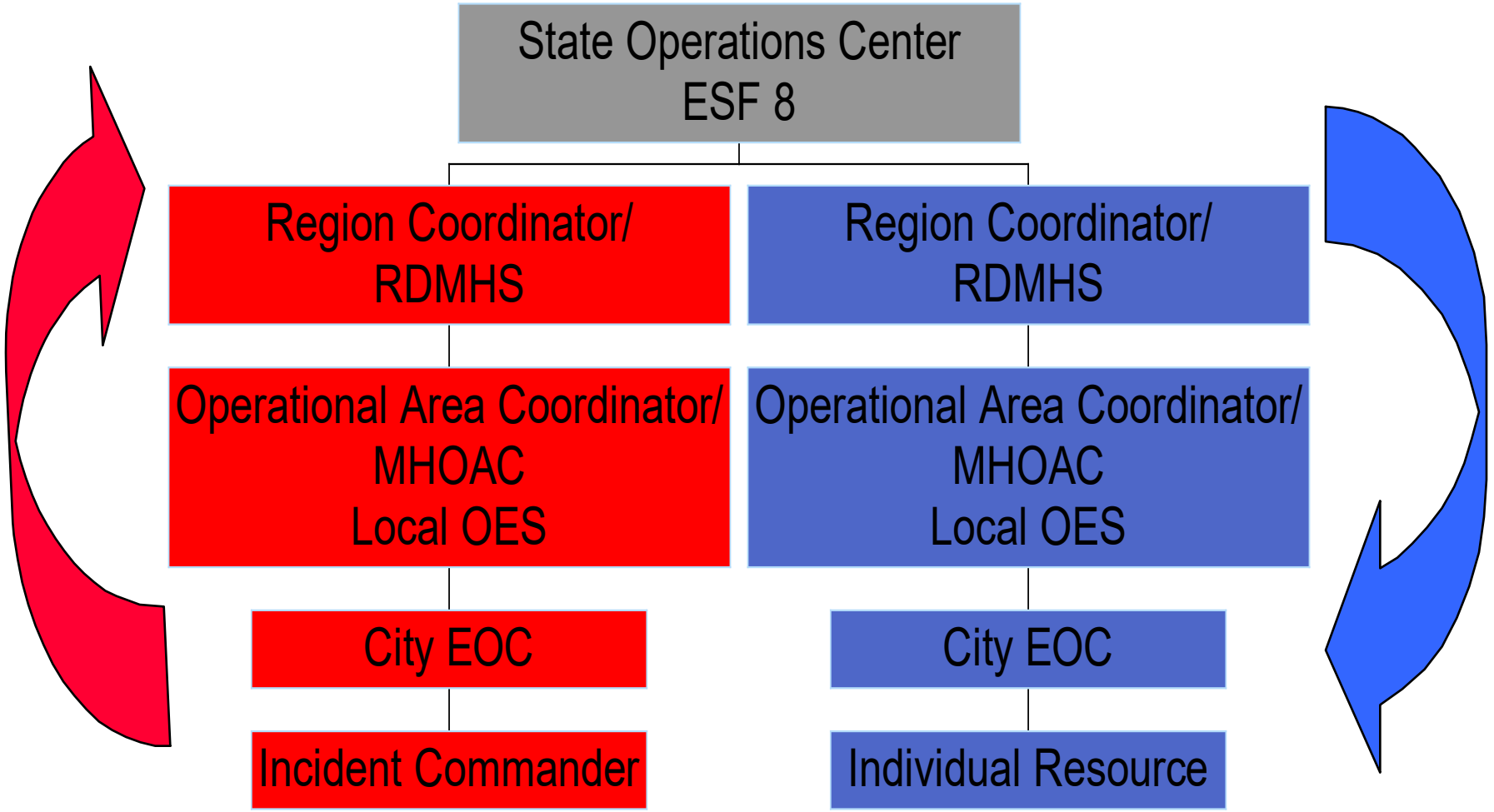


Slide: Laney Davidson LC Disability Consulting Presentation Emergency Management and the ADA

California

58 Counties
6 Mutual Aid Regions

How the Medical Health Mutual Aid System Works



Ambulance Strike Teams (ASTs)

- 37 DMSUs strategically positioned throughout the state.
- Includes:
  - (5) Ambulances of like type
  - (1) Strike Team Leader
  - (1) Leader Vehicle that provides food, water, medical supplies, and equipment for up to 72 hours

California Ambulance Industry Private Ambulance Providers Serve Both EMS & Hospitals

- 715 public & private ambulance services
- 170 private sector ambulance services
- 3,600 licensed ambulances
- 74% ambulances private operators
- 60,000 EMTs & 20,000 paramedics
- 20,000 people are employed by private ambulance services
- 220 out of the 337 emergency ambulance services areas (zones) are served by private contractors

State Operations Center

California State EMS Authority
Ground and Medical Assets

Disaster Healthcare Volunteers System








- 10,391 Physicians and PA's
- 49.747 Nursing Services
- 9,744 EMS
- 2973 pharmacists
- 6, 897 Hospital Ancillary
- 3130 Animal Services
- 6,815 Social Services
- 7,583 Management and Support Services

Includes: DHV/MRC/CAL-MAT/CA Health Corps

FEMA/ASPR Expansion Plans Patients In Tents & Military Bases

7.7 Magnitude Earthquake Riverside Southern California

Scenario PROJECTIONS

- USGS projections:
  - 47,500 children would be displaced
  - 10,070 children would be injured

- Los Angeles County projected to need:
  - 959 pediatric Med/Surg beds
  - 419 PICU Beds

Scenario Knowns (First 24 Hours)

Air Transportation Routes

- Palm Springs International
- San Diego to Yuma 173 miles
- Military Bases may be used for refueling
- Possible triage and movement further east?

Evacuation By Air

- Med Evac Helicopter
- Range 250 Miles – will vary by aircraft type
- Patient Capacity = one

- Blackhawk Helicopter
- Range = 1200 Nautical Miles/1381 Miles
- Up to four patients/could be limited
- Military must approve use

- Fixed Wing
- Range is better
- More Patient Space

Evacuation By Sea

- Where and How?
- Tsunami Risk

Scenario Progression

CHOC: Children's Health of Orange County
334 beds 55 PICU 91 NICU

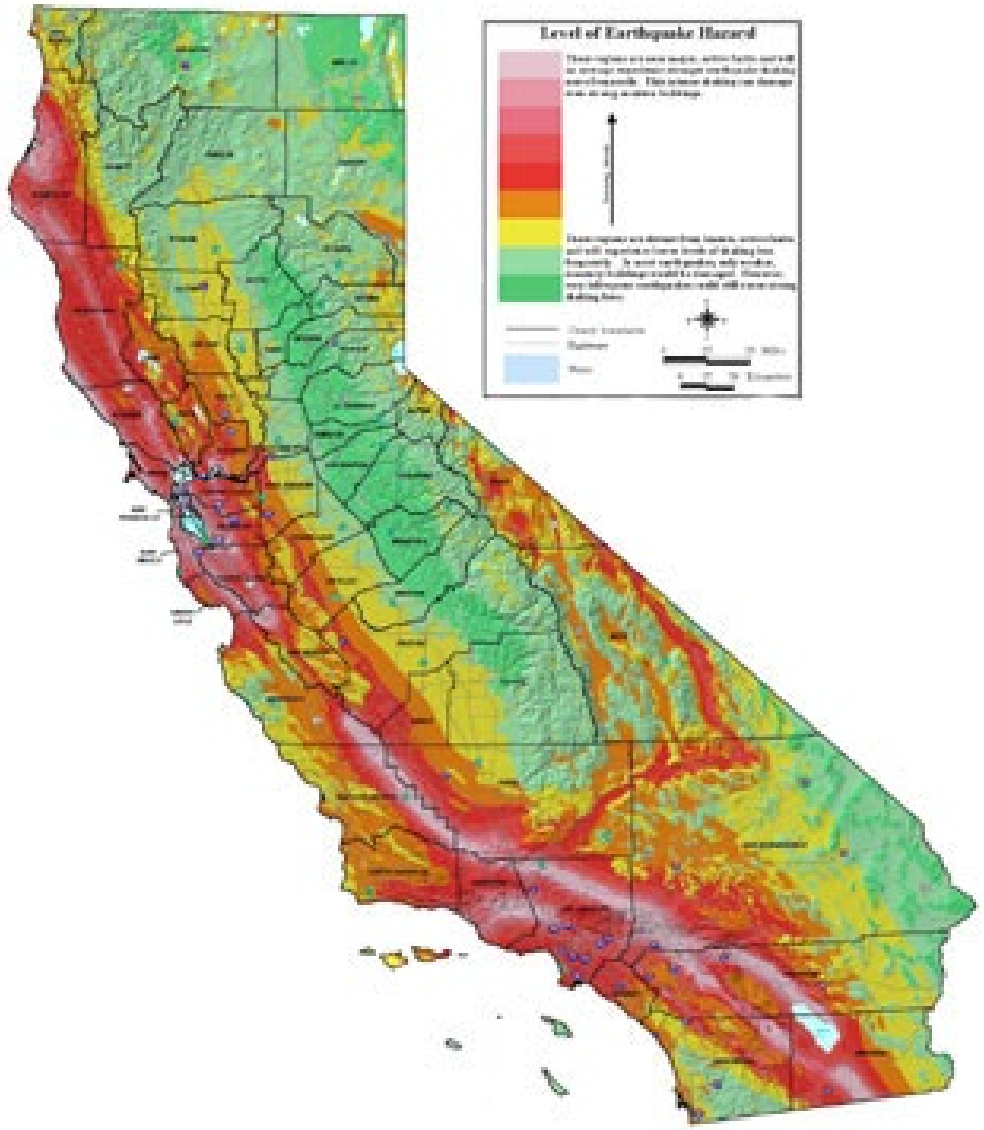
Loma Linda Children’s Hospital
364 beds 59 PICU 84 NICU

- Sylmar 1971
- Feb 9th 6 am
- San Fernando Valley
- M 6.6 duration 12 seconds
- 65 deaths, 2000 injured

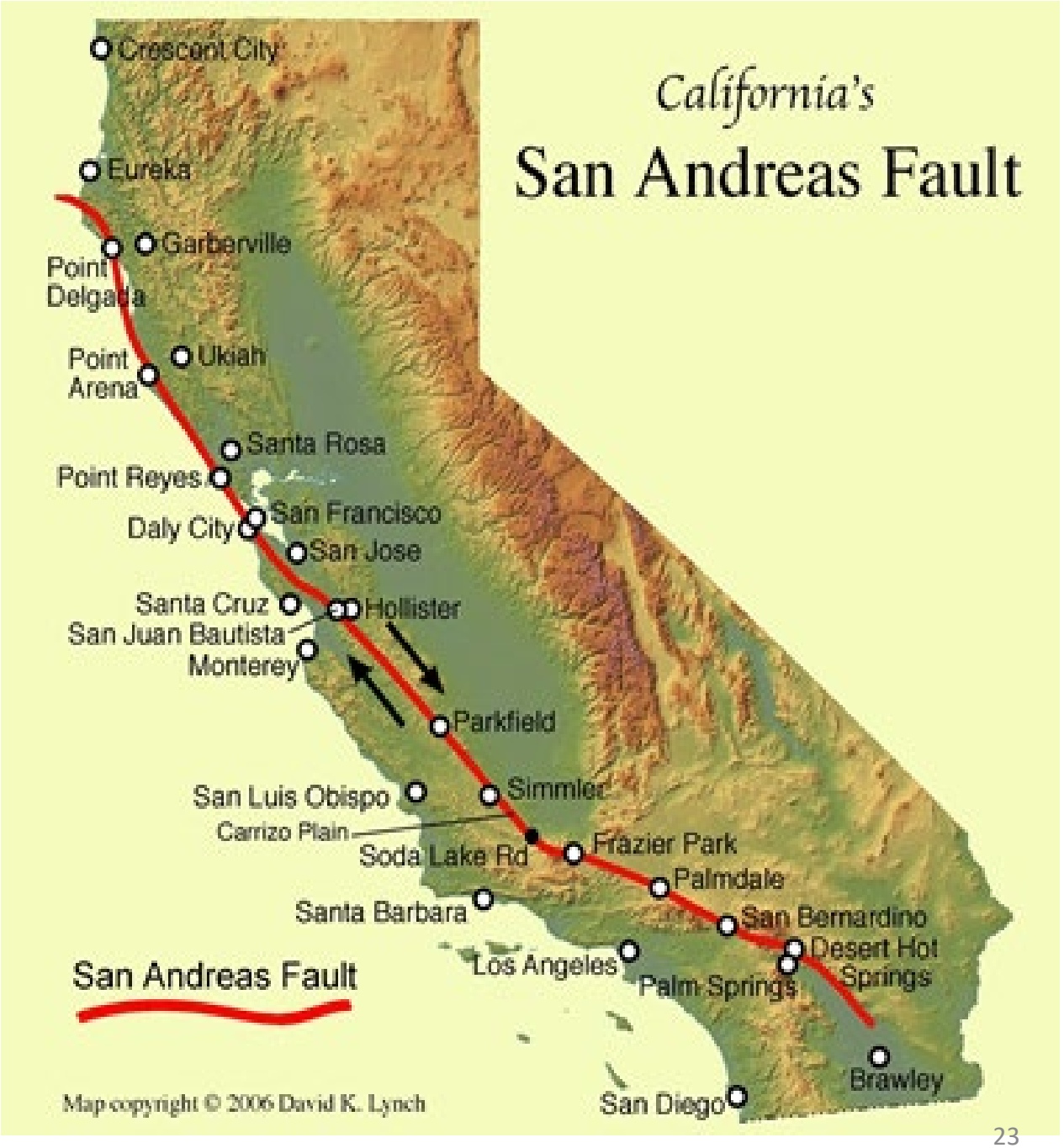
- Northridge 1994
- San Fernando SoCal
- January 17th 4 am
- M 6.7 duration 8 seconds
- 57 deaths, 9000 injured

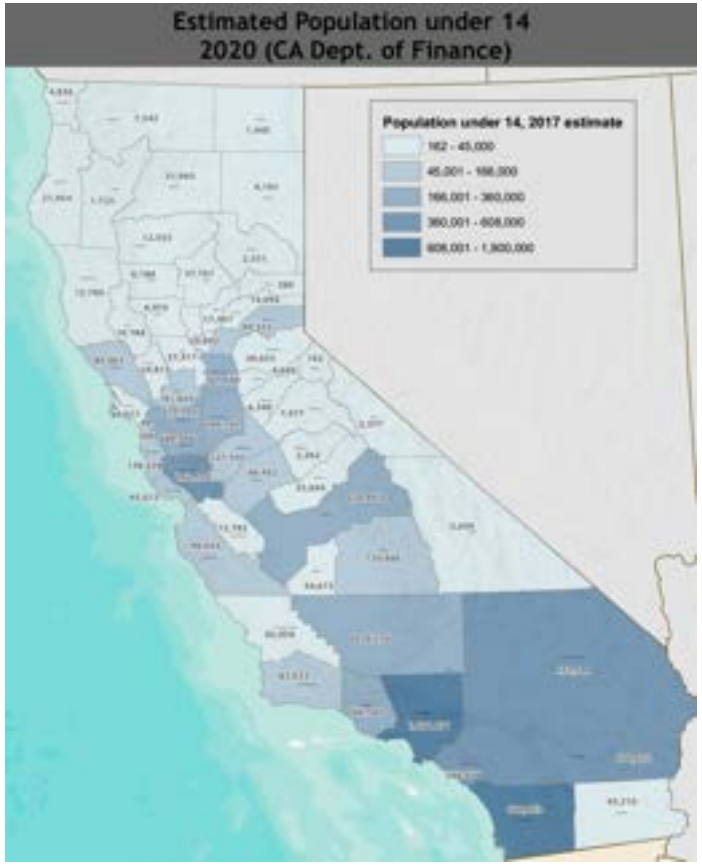
- Loma Prieta 1989
- Santa Cruz, M 6.9 5pm
- Duration 15 seconds
- 63 deaths, 3,757 injured
- 12,053 displaced

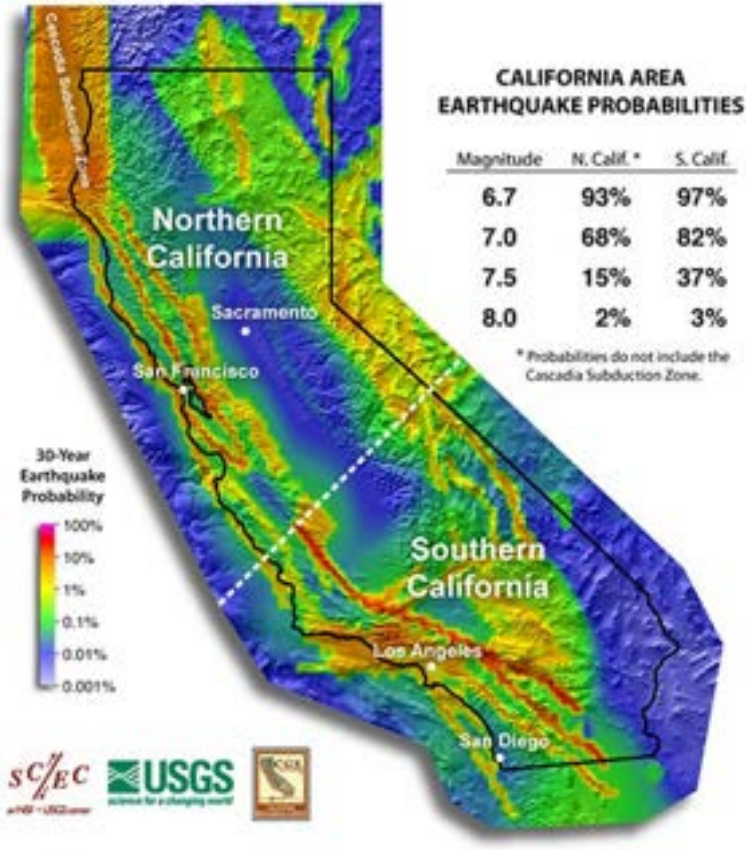

Explorer Ridge
Juan de Fuca Ridge
Subduction Zone
Washington
Oregon
Blanco fracture zone
Crescent City
Eureka
Mendocino fracture zone
California
Motion of Pacific Plate
Pacific Ocean
San Francisco
Hollister
Monterey
Parkfield
Murray fracture zone
Frazier Park
Palmdale
Santa Barbara
Los Angeles
Molokai fracture zone
San Diego
Brawley


Level of Earthquake Hazard

San Andreas Fault Locked and Loaded







California's Pediatric Centers and Earthquake Risk

5 Essential Functions of Patient Movement

- Patient Evacuation
- Regulation (Coordination of Transport Resources and Destinations)
- En-Route Medical Care
- Patient Tracking
- Repatriation (aka Return or Re-Entry)

Mission Task Evacuation

CHOC: Children's Health of Orange County
334 beds 55 PICU 91 NICU

Loma Linda Children’s Hospital
364 beds 59 PICU 84 NICU

Evacuation

Moving pediatric patients out of state is complicated, and staff and equipment are resource-intensive

The Pediatric Healthcare System Does Not Travel Well

- Planned Moves
- Noticed Events
- No Notice Events

Scenario
Patient Movement Challenge

Who To Move? How Many? How To Do It? Where to Go?

SERF Children's Hospital Bed Capacity
47 Facilities 3,283 beds

- Cardon Children's Medical Center, Mesa AZ, 162 Beds
- Phoenix Children's Hospital, Phoenix, 457 Beds, Level 1
- Children's Center at Sutter Medical, Sacramento, 127 Beds
- Children's Hospital Colorado, Aurora, 434 Beds, Level 1
- Children's Hospital, Colorado Springs, 118 Beds, Level 1
- St. Lukes Children's, Boise, 113 Beds
- The Children's Hospital of Oklahoma, OK City, 246 Beds, Level 1
- Doernbecher Children's Hospital, Portland, 145 Beds, Level 1
- Randall Children's Hospital at Legacy Emanuel, Portland, 81 Beds, Level 1
- Texas Children's Hospital, Houston, 724 Beds, Level 1
- Children's Memorial Hospital, Houston, 310 Beds, Level 1
- Children's Medical Center, Dallas, 289, Beds, Level 1
- 18 Total in Texas
- Children's Hospital of Nevada, 77 Beds, Level 2
- 2 Additional in Nevada
- Eight Children's Hospitals in Illinois
- Seven Children's Hospitals in Missouri, two Level 1 facilities

Cushing AM, Bucholz EM, Chien AT, Rauch DA, Michelson KA. Availability of Pediatric Inpatient Services in the United States. Pediatrics. 2021 Jul;148(1):e2020041723. doi: 10.1542/peds.2020-041723. Epub 2021 Jun 14. PMID: 34127553; PMCID: PMC8642812.

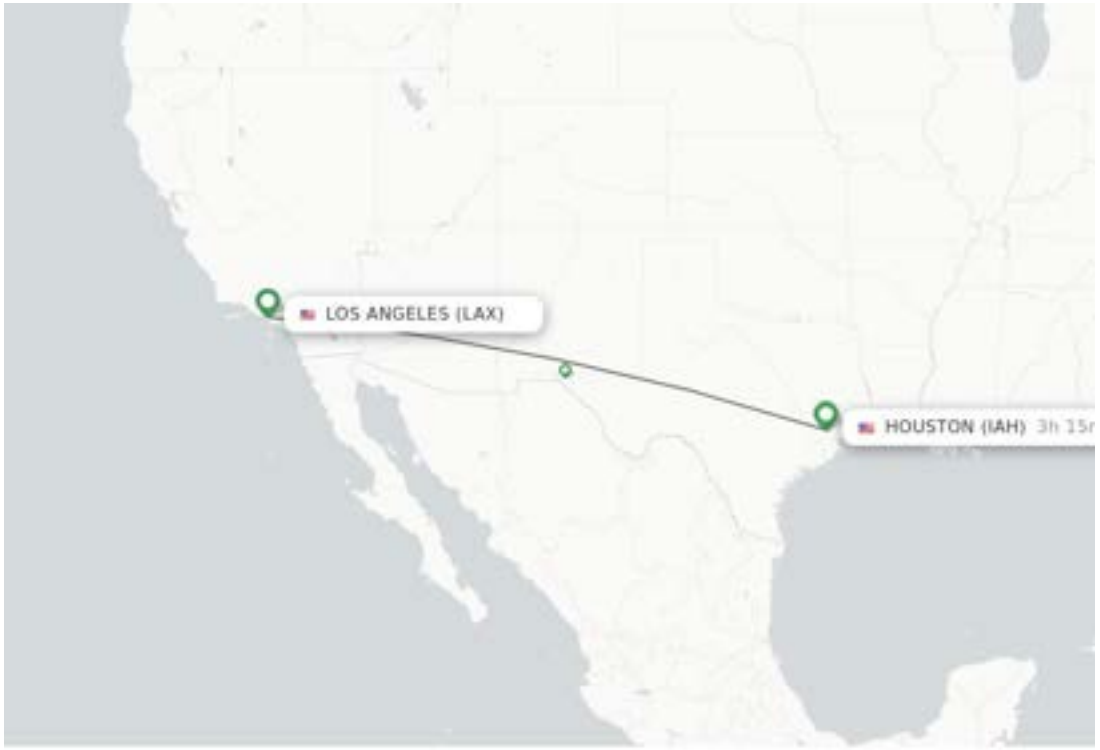
SERF Children's Hospital Bed Capacity
47 Facilities 3,283 beds

- Cardon Children's Medical Center, Mesa AZ, 162 Beds
- Phoenix Children's Hospital, Phoenix, 4[illegible]eds, Level 1
- Children's Center at Sutter Medical, Sacra[illegible]27 Bed
- Children's Hospital Colorado, Aurora, 434 Bed[illegible]
- Children's Hospital, Colorado Springs, 118 Bed[illegible]
- St. Lukes Children's, Boise, 113 Beds
- The Children's Hospital of Oklahoma, OK C[illegible]
- Doernbecher Children's Hospital, Portland, 1[illegible]

- Ra[illegible]dall Children's Hospital at Legacy Emanuel, P[illegible]land, 81 Beds, Level 1
- [illegible]as Children's Hospital, Houston, 724 Beds, Level 1
- [illegible]dren's [illegible]morial Hospital, Houston, 310 Beds,
- [illegible]dical Center, Dallas, 289, Beds, Level 1
- [illegible]pital of Nevada, 77 Beds, Level 2
- [illegible]ada
- [illegible]en's Hospitals in Illinois
- [illegible]en's Hospitals in Missouri, two Level 1 [illegible]cilities

Occupancy Rate 78-94%

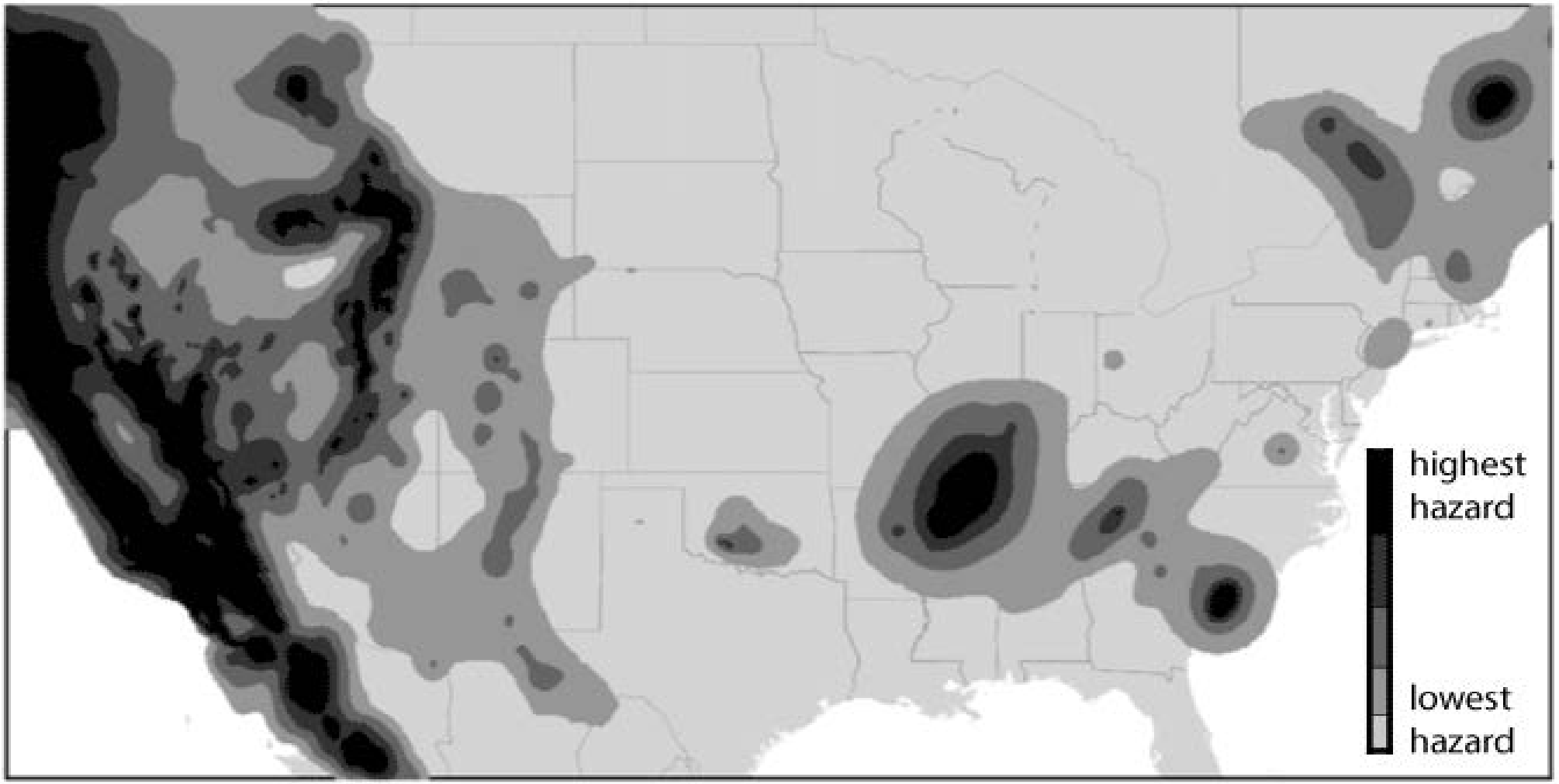
Cushing AM, Bucholz EM, Chien AT, Rauch DA, Michelson KA. Availability of Pediatric Inpatient Services in the United States. Pediatrics. 2021 Jul;148(1):e2020041723. doi: 10.1542/peds.2020-041723. Epub 2021 Jun 14. PMID: 34127553; PMCID: PMC8642812.



Distance Presents Challenges

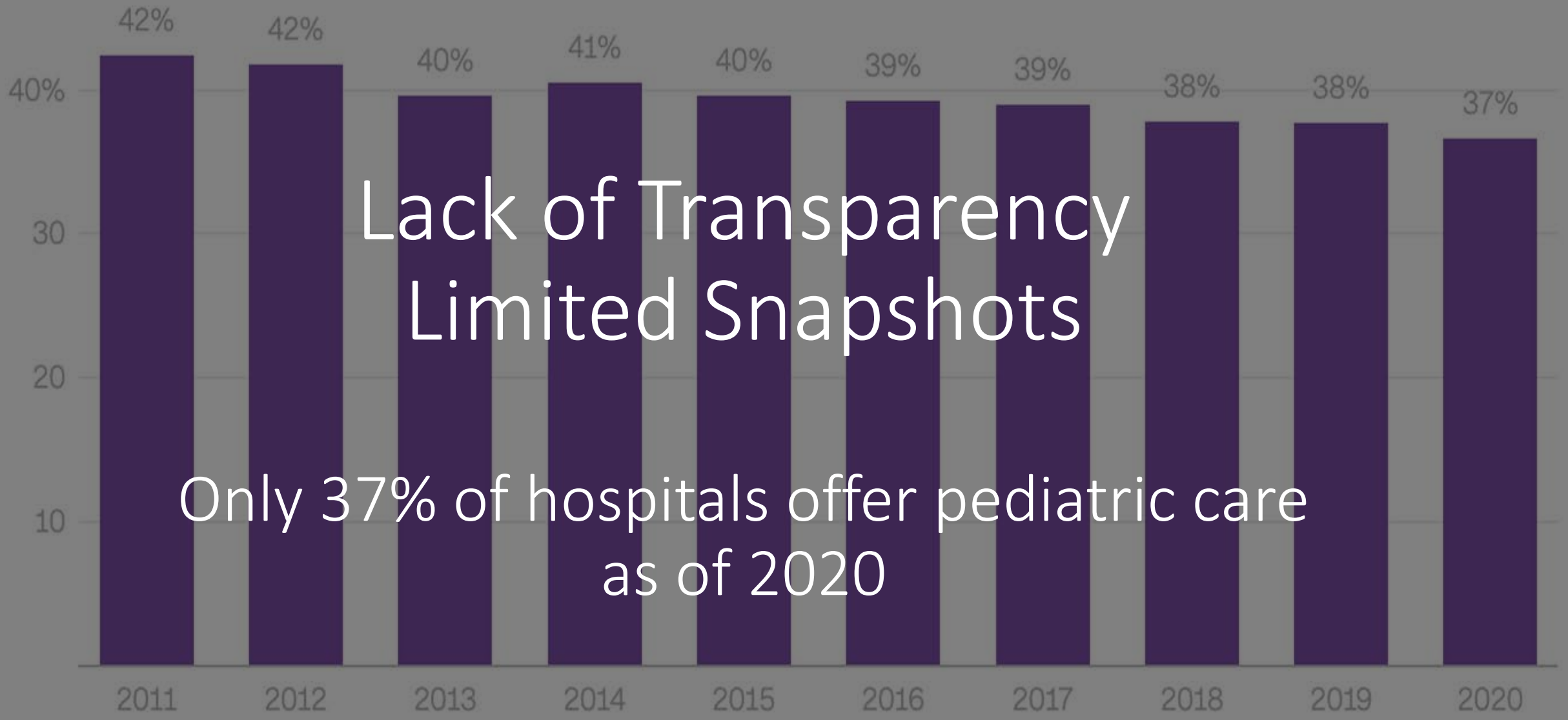
Los Angeles to Houston 1371 Miles 1191 Nautical Miles

Transportation Infrastructure and Earthquake Evacuation Routes and Resources



DoD Contraindications Air Medical Evacuation

Pregnancy > 34 weeks	Seizure within last 2 weeks
Hemorrhaging (Hgb < 8.5)	New onset cardiac dysrhythmia
Post-op < 72 hours	Unbivalved orthopedic cast
Acute Coronary Syndrome	Communicable disease
< 7 Days: Open Heart Surgery	Respiratory isolation inc. possible TB
< 7 Days: Craniotomy	Psychologically unstable
< 7 Days: Spinal Surgery	Decompression sickness
Pneumocephalus	Agitation or other distracting behavior
Neonates/young pediatric patients	



Lack of Transparency Limited Snapshots

Only 37% of hospitals offer pediatric care as of 2020

Emergency Transport Healthcare Operations and Safety (ETHOS) is a real-time* geo-database

AASM: Association of Air Medical Services www.airmed.org

Specialty Transport Vehicles
No Plug and Play Solutions

Photo: Pinnacle Copyright https://www.thehindubusinessline.com/news/national/pinnacle-industries-introduces-neonatal-ambulances-for-maharashtra/article65463745.ece

A Set-Up For

Sudden Shifts from Normal to Austere Care

Immediate Need Decision-Making

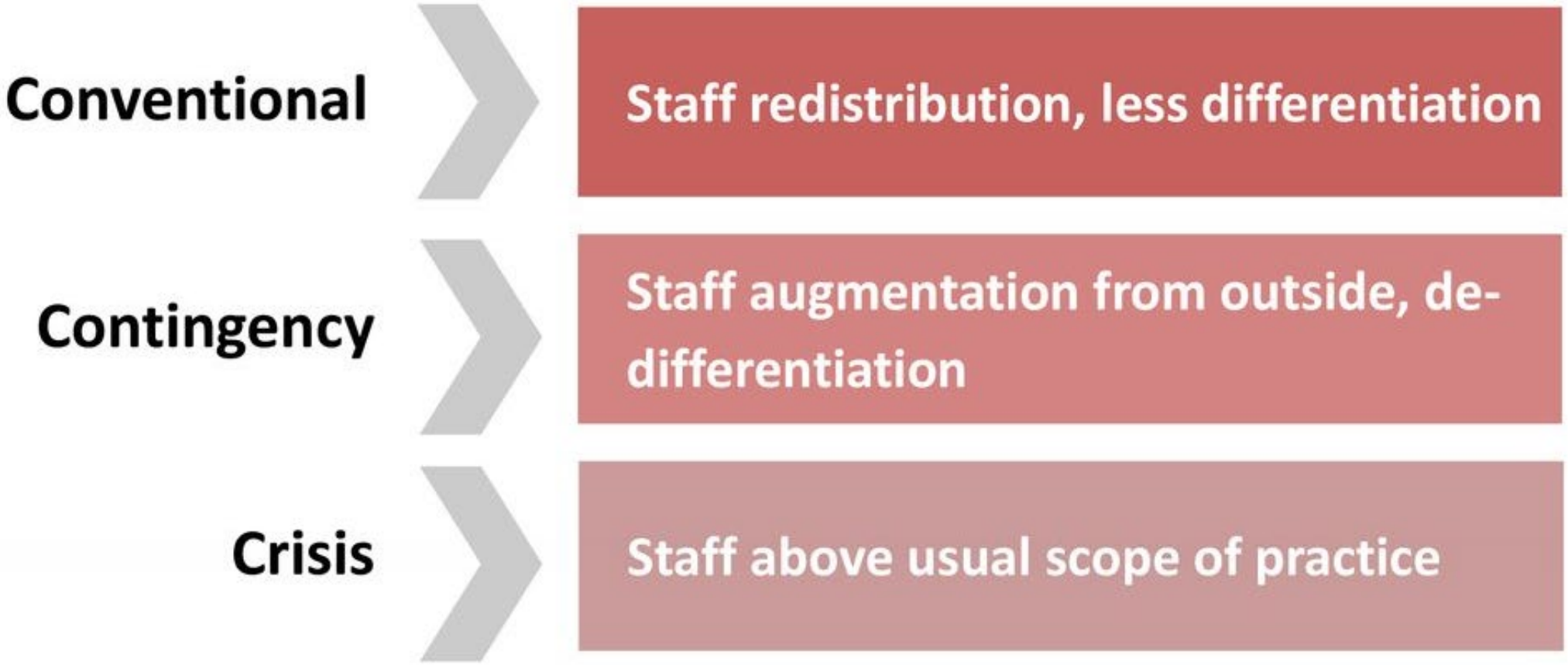
Crisis and Contingency Care
Who Stays and Who Goes?

Crisis Leadership
Relies On Information Sharing

The party already started – you are late – you need to catch up

Not every incident has a playbook – sometimes you just need to think – “sensemaking” in chaos

Staffing Strategies



Very Low Birth Weight Premature Infants And Evacuation

Back To Basics

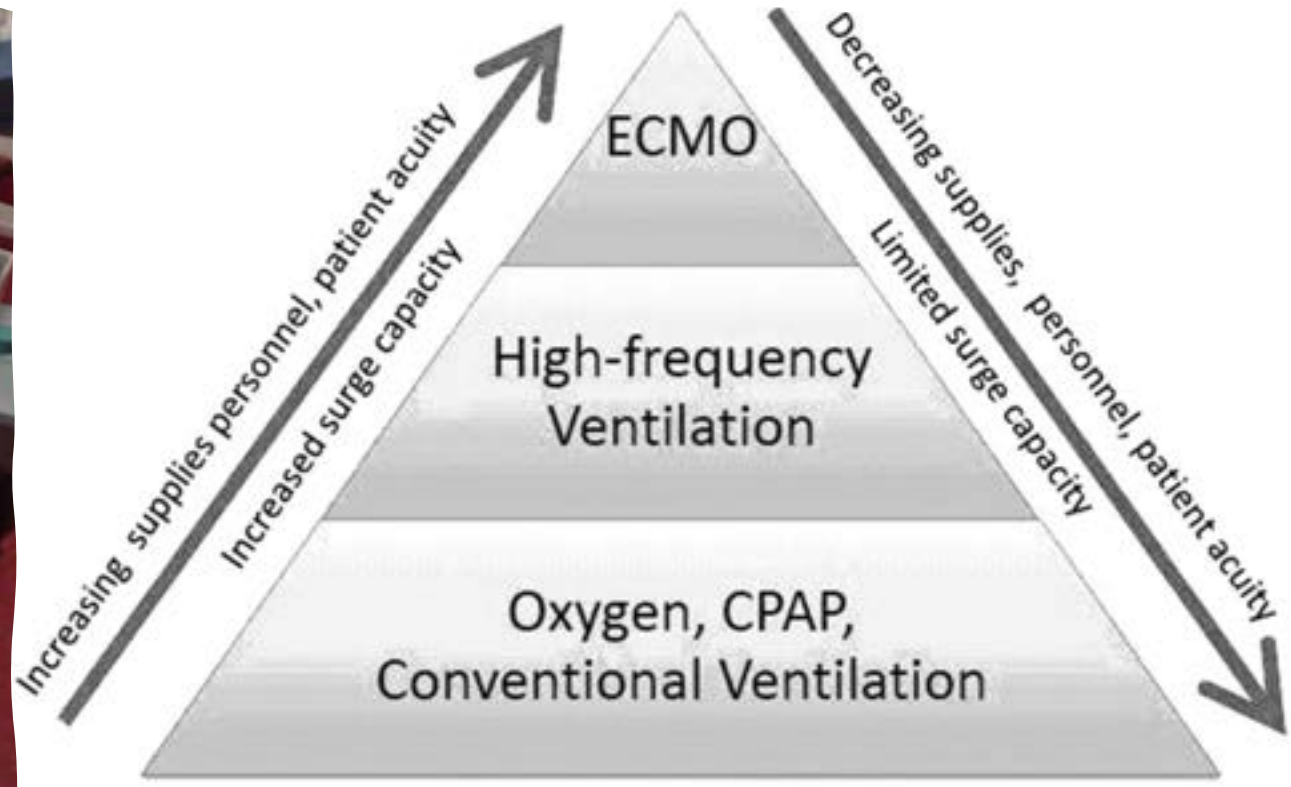
Infant/Mother Transport System

Low Tech and No Tech Solutions

Austere Feeding
A spoon, A syringe, A med cup at a time…

ECMO & Jet Ventilation Infants

Limited Options Other Than Shelter in Place



KATRINA 2005: LARGE-SCALE PEDIATRIC EVACUATION

Widespread chaos, desperation & inefficiency"

RECOMMENDATION: ESTABLISH A DATABASE OF PEDIATRIC CAPABILITIES

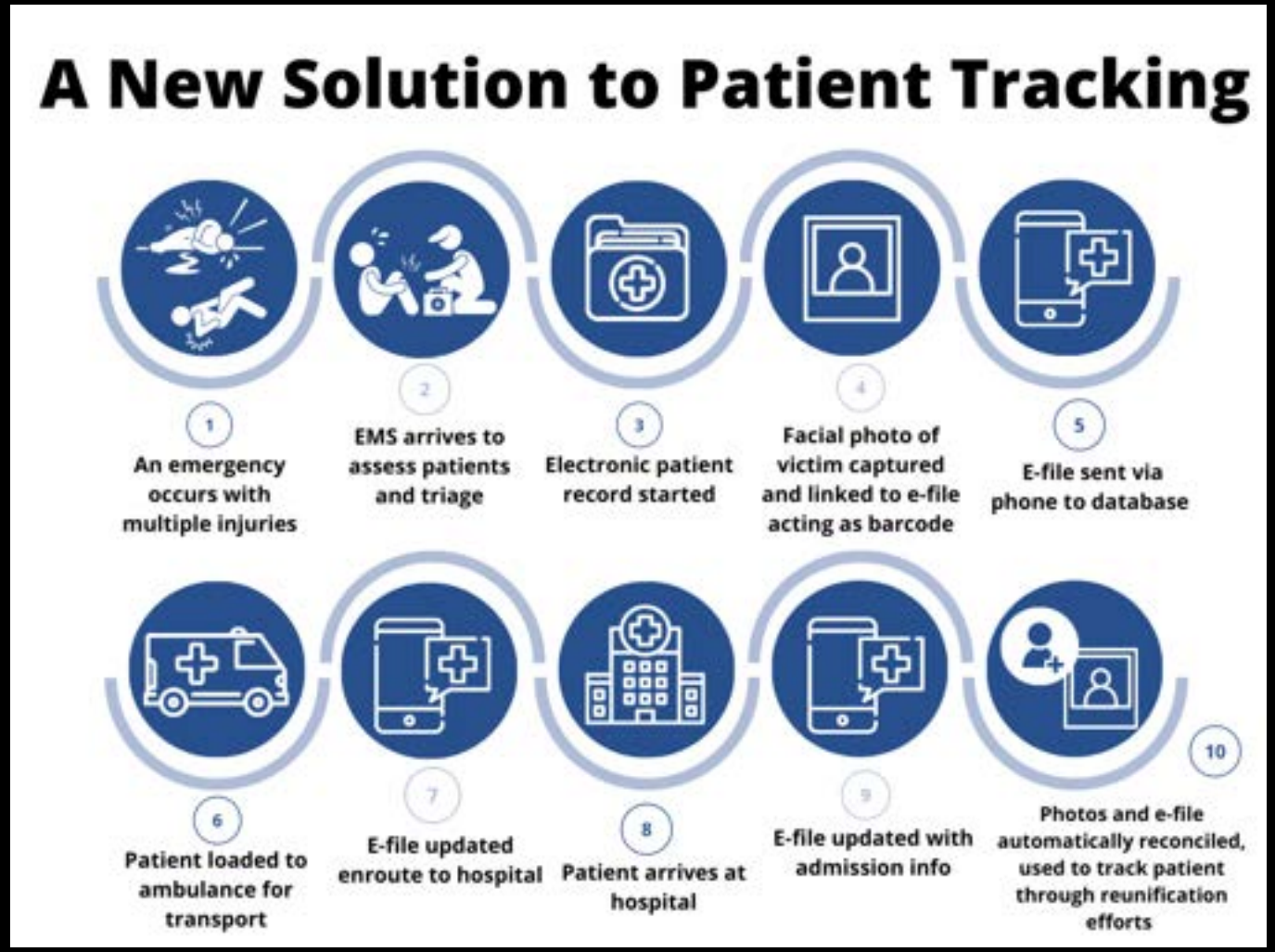
Source: Dr. Romansky Unique Vulnerabilities Pediatric Resiliency Presentation May 2016

No Notice
Immediate Need

The ONLY Cavalry is the Local Response Community YOU Exercise With

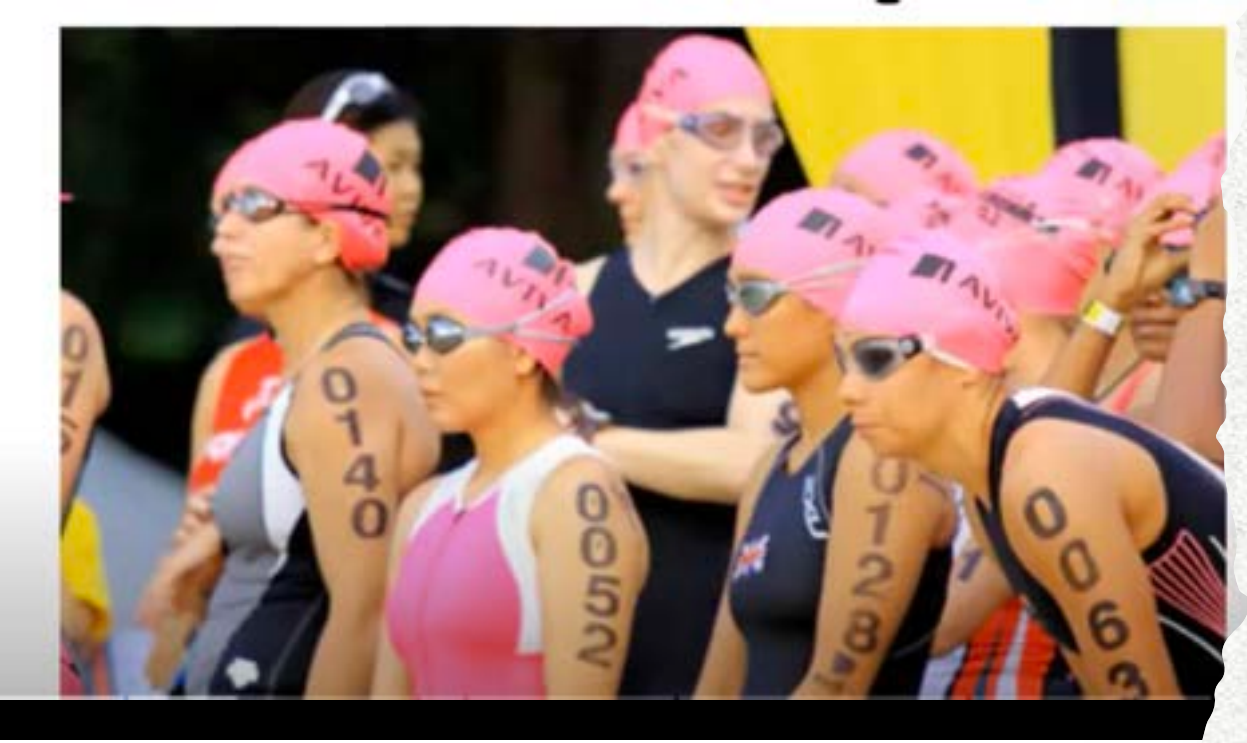
Ambulance Mutual Aid May Take Over 24 to 72 hours to Get to You If the Roads are Clear

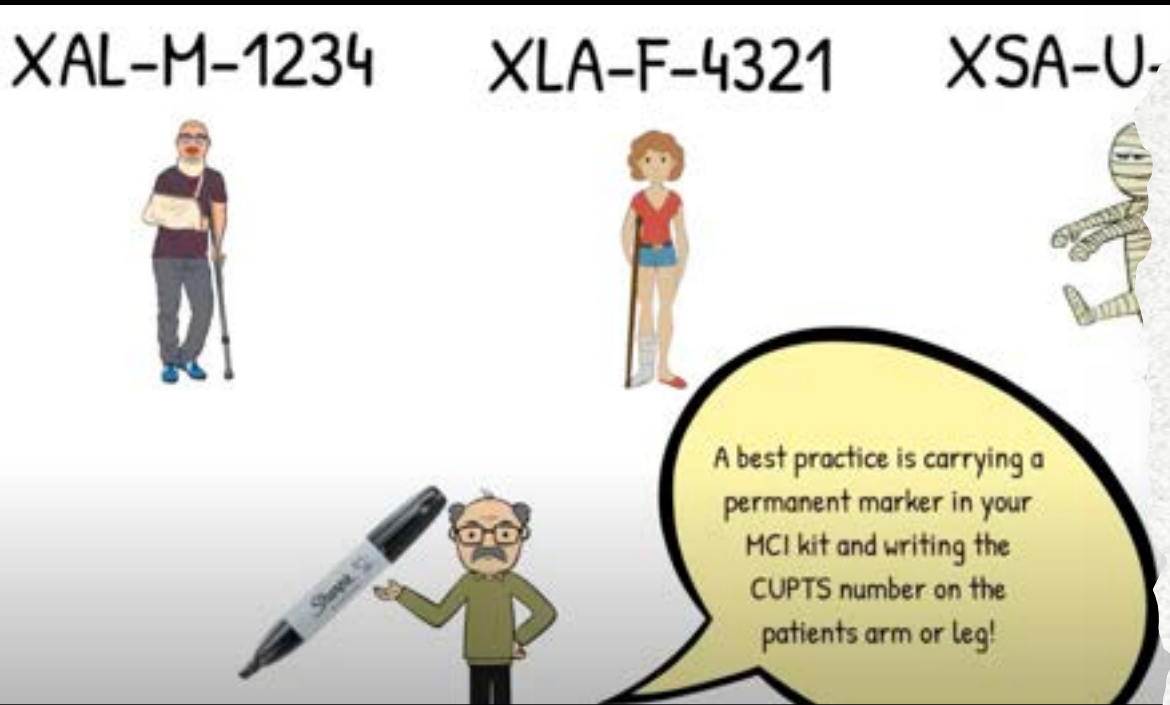
“BE PREPARED TO USE NON-TRADITIONAL TRANSPORT”



Technology Solutions Easily Disrupted

Source: https://www.jems.com/major-incidents/mass-casualty-incidents/patient-tracking-and-victim-reunification/





California Tracking Solution

“The Sharpie”

- Patient Movement Plan
- Simple Low Tech
- Firescope County #
- M/F/Unknown
- Last 4 digits of Triage Tag

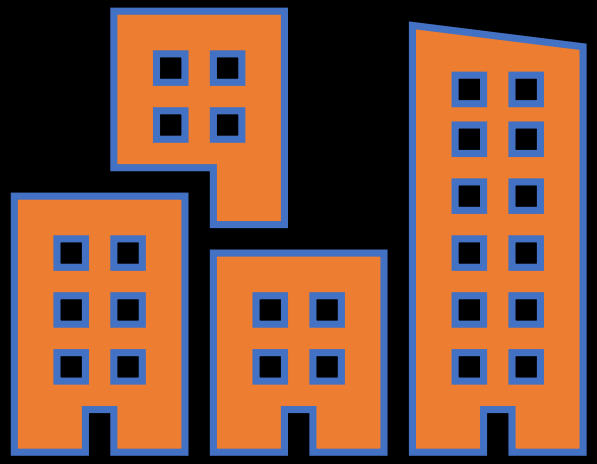
Where Do We Focus?

Return to Preparedness Principles
Neighbor To Neighbor

Industry	Recommendations till Re-supply	Real World
Hospitals	96 hours Joint Commission	Weeks
EMS	72-96 hours (Ambulance Strike Team) FEMA	Months
Families	3 days (ideal 2 weeks) FEMA	Years

Shelter In Place
Mobilize Staff, Space, Stuff and Systems

Fully Embrace Mitigation

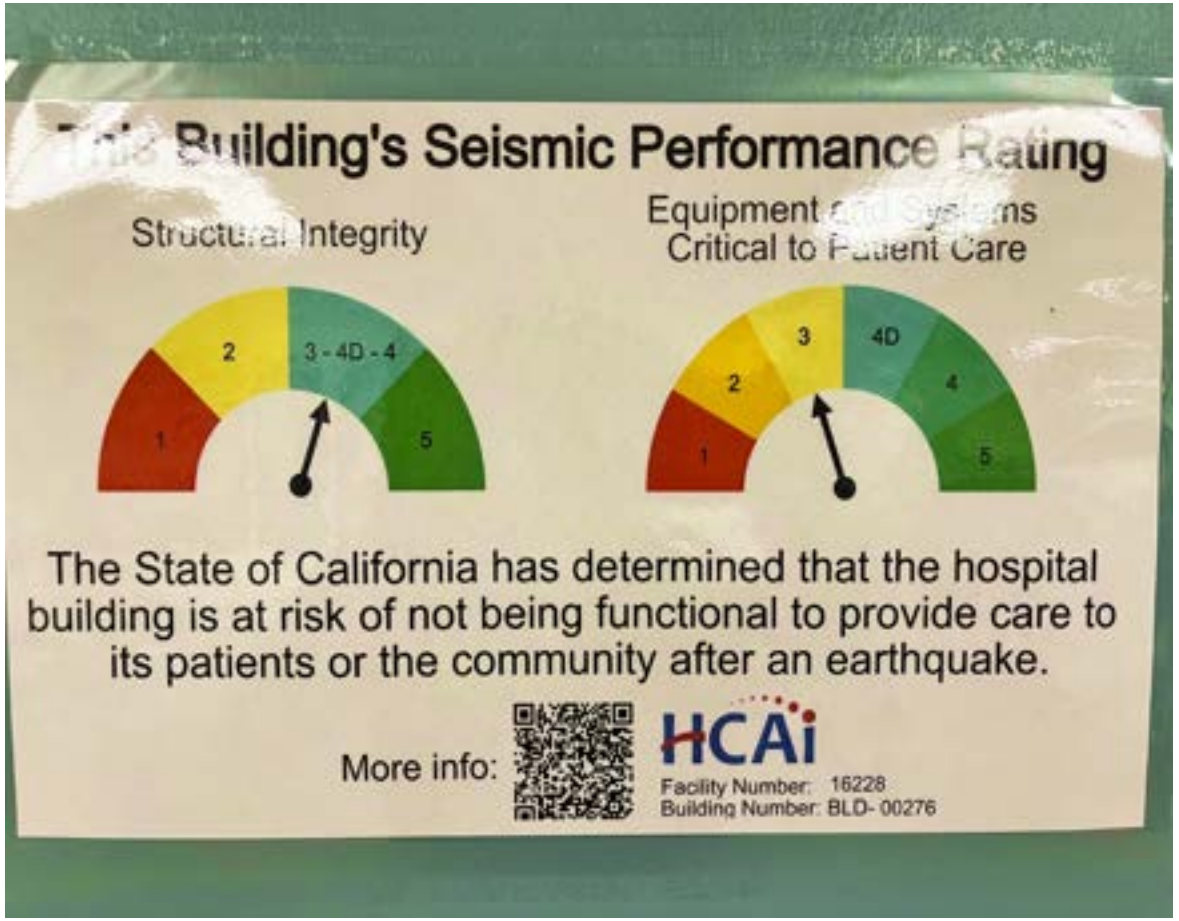


Hardened Infrastructure
Enforced Building Codes

Lives Saved
Harm Prevention
Cost Savings

Hospital Seismic Safety Act 1972

63% California Hospitals Non-Compliant 2030 Mandate

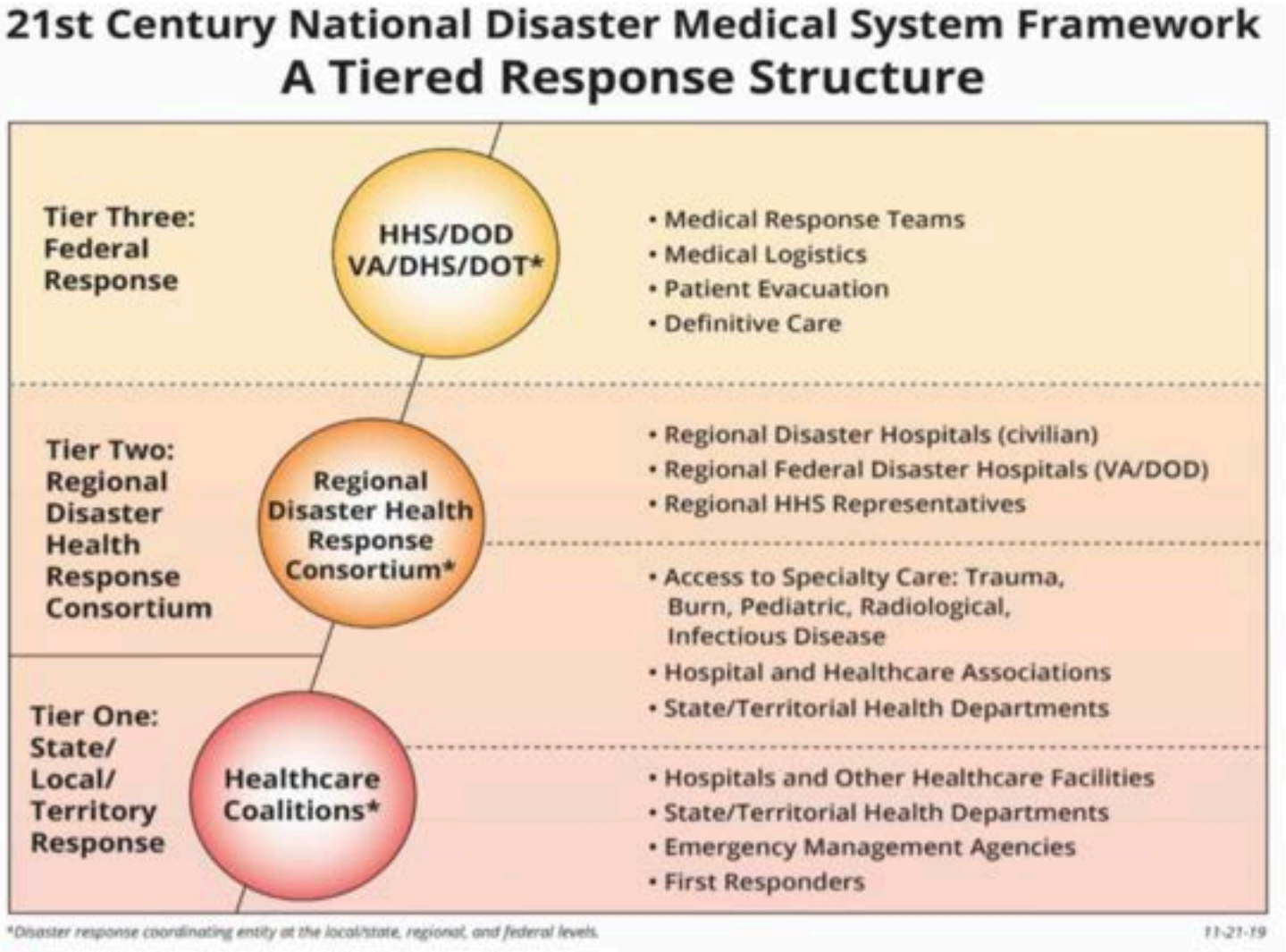


Kaiser Permanente hospital in Granada Hills

Kaiser Permanente hospital in Granada Hills

Photo by Gary B. Edstrom

ASPR's Vision of Pediatric Disaster Centers of Excellence



ASPR Funded Pediatric Disaster Centers of Excellence Improve Pediatric Disaster Regional Capability

Eastern Great Lake Pediatric Consortium for Disaster Response

- (6 state collaborative)

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

- (5 state collaborative)

Gulf Coast Pediatric Network

- (7 state collaborative)

SERF Lessons Learned First 24 Hours

SPACE

STAFF

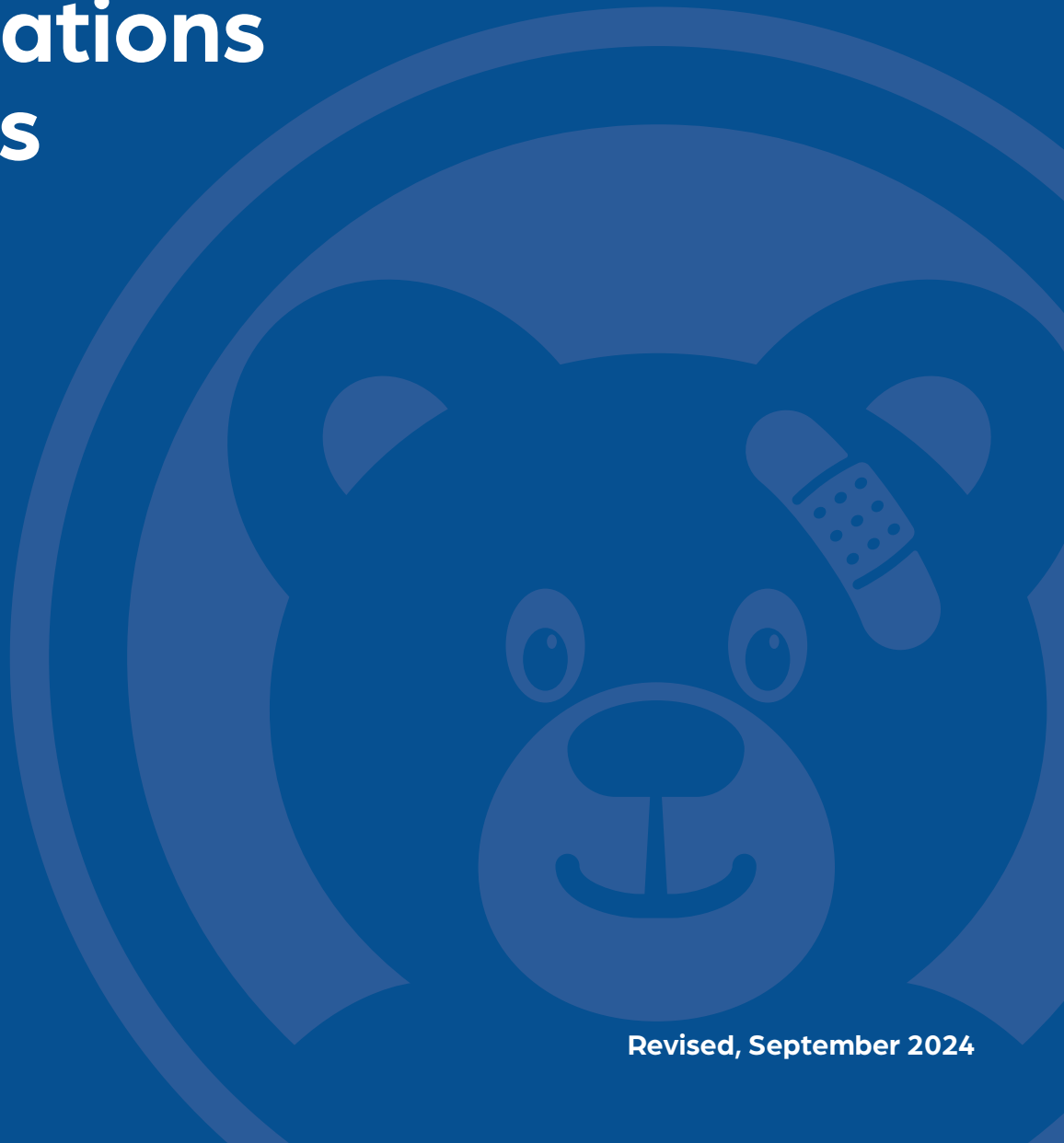
STUFF

Pediatric Care Narrow Margins Incredibly Fragile

Thank You

Questions

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



EIIC
EMSC Innovation and Improvement Center

Revised, September 2024

EIIC
EMSC Innovation and Improvement Center

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

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OVERVIEW & INTRODUCTION

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

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

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

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

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

NEW DOMAIN

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

PROGRESSIVE CATEGORIES OF RECOMMENDATIONS: A KEY MODIFICATION

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

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

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

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

IMPLEMENTATION

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

QUESTIONS & FEEDBACK

To provide us your comments, please **contact us**.

Find additional resources at **https://bit.ly/PedsDisasterChecklistOverview**

SUGGESTED CITATION

Barrett J., Rodriguez M., Moegling, M., Chung, S. EMSC Innovation and Improvement Center. Disaster Domain Toolkit Subcommittee. (2022). Checklist of Essential Pediatric Considerations for Every Hospital's Disaster Policies.

DOMAIN 1: PEDIATRIC DISASTER CARE COORDINATION

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

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain–1**

DOMAIN 2: REGIONAL COALITION–BUILDING

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

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

DOMAIN 2: REGIONAL COALITION BUILDING (Continued)

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

DOMAIN 2: REGIONAL COALITION BUILDING (Continued)

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-2**

DOMAIN 3: PEDIATRIC SURGE CAPACITY

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

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

DOMAIN 3: PEDIATRIC SURGE CAPACITY (Continued)

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-3**

DOMAIN 4: TRIAGE, INFECTION CONTROL, AND DECONTAMINATION

Decontamination is essential in a disaster response; there are several necessary considerations unique to the pediatric population.

RECOMMENDED ACTIVITY	FOUNDATION	INTERMEDIATE	ADVANCED
Pediatric infectious disease, chemical or biological exposure suspected	○ Identify a separate triage area and entrance away from other ED patients for both infectious and/or chemical exposure concerns. ○ Ensure adequate PPE (gown, gloves, masks, including N95 for airborne or PAPR) is easily available to staff. ○ Establish a relationship with a regional pediatric center and/or pediatric infectious disease specialist for consultation as needed ahead of time. ○ Consider a Limited Visitor Policy during a disaster, allowing for one parent/guardian with a child.	○ Establish an isolation area for infectious disease exposures/concerns (ideally negative pressure areas for all airborne disease: measles, TB, SARS, MERS, COVID, Ebola). ○ If a negative pressure room is not available, identify a space with doors that will remain closed. ○ Secure pediatric PPE including disposable pediatric-sized face masks.	○ Set up appropriate PPE donning/doffing stations outside of all rooms. ○ Establish washing/shower areas in or next to isolation rooms.
Decontamination	○ Establish a basic contamination process, even if no decontamination area is available, that includes: • Disrobe patient • Wipe down skin • Irrigate eyes • Provide clean patient gowns/blankets ○ Keep families together when possible and allow parents to wash children. ○ Be mindful that children are at risk of hypothermia; have towels/dry clothes ready for children.	○ Establish a dedicated decontamination area with specific pediatric considerations. ○ Ensure staff is available to direct patients to the decontamination area. ○ Develop a plan to move small/immobile children through showers, which are a fall risk. Do not hold child. Consider using a laundry basket/bassinet/other safe way of moving a child through the shower. ○ Aim for a 3–6 minute shower with a water temperature of between 98-110oF (to avoid hypothermia) and max water pressure of 60 psi (to avoid damage to skin).	○ Protect modesty when possible, including separating sexes other than family members with curtains. ○ Provide same-sex staff member to help when family not available. ○ Provide modesty covers to patients immediately after showering.
Process for disinfection of communally available toys in the facility	○ Wipe down all toys and shared objects with bleach wipes or disinfectant wipes after every use regardless of patient chief complaint.		

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-4**

DOMAIN 5: EVACUATION

Given that many institutions have limited long-term pediatric capabilities, planning for the safe and effective evaculation of pediatric patients is an important aspect of pediatric disaster response.

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

DOMAIN 5: EVACUATION (Continued)

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-5**

DOMAIN 6: PEDIATRIC PATIENT TRACKING & FAMILY REUNIFICATION

Pediatric disaster response is unique in that it involves preparing for the arrival of unaccompanied minors, developing family tracking and reunification policies, and considering special security situations.

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

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

RECOMMENDED ACTIVITY	FOUNDATION	INTERMEDIATE	ADVANCED
Family Reunification Planning	○ Develop a comprehensive internal planning team to understand hospital family reunification capabilities and conduct a needs assessment of local community partners (including social work, pediatricians, emergency management, and child life if available). ○ Engage adjunct hospital departments (Public Relations, Risk Management, Chaplaincy, Food Services) for planning purposes. ○ Develop procedures to recommend appropriate social media usage by staff, families, and patients (only the PR or communications/media staff will post official updates - staff are to refrain from personal posts during an incident). ○ Assign staff to monitor local social media (including local social media such as the city's community chatter page) in case there is new information being shared or incorrect information that should be corrected.	○ Develop a leadership chain of command and organizational structure concerning family reunification with specific attention into how family reunification is incorporated into your overall emergency operations plan and HICS. ○ Develop procedures to establish and operate a Hospital Family Reunification Center, Pediatric Safe Area, and Family Reunification Site. Please see **Family Reunification Following Disasters: A Planning Tool for Health Care Facilities** for a description of these areas. ○ Create a family intake form that can be used to compare answers to questions given by an unaccompanied child to aid in reuninfication, such as: parents' names, siblings names, pets names, city they live in, school/teacher's name, pediatrician's name, names of friends or neighbors or relatives) to information provided by adults claiming to be guardians when other means of verification are unavailable. ○ Include family reunification in hospital **drill or tabletop exercise**.	○ Develop procedures with external stakeholders that govern the sharing of relevant information with other hospitals, public health agencies, and other partners involved in the response, as legally permitted, to facilitate family reunification. ○ Consider leading regional family reunification drills and/or tabletop exercises to test plans, plan components, and response by certain areas within the hospital or community. ○ Offer to serve as a resource for other hospitals to augment their plans.
Space Use	○ Identify areas in the hospital that can serve as: • Secure private location for Pediatric Safe Area (PSA) for unaccompanied children. • Hospital Family Reunification Center (HFRC). • Family Reunification Site (FRS). This process may occur at the hospital or—for medically cleared children—at a community site with others who can assist with reunification (law enforcement, educators). See **Family Reunification Following Disasters: A Planning Tool for Health Care Facilities** for a description of the areas. • Consider a space for bereavement notification.	○ Pediatric Safe Area, Family Reunification Site, and Hospital Family Reunification Center should be in separate areas in the hospital. ○ Ensure that the Hospital Family Reunification center has a waiting area and small rooms for private conversations.	○ Ensure that there is a private notification center for parents who are seeking information about their child's status (this does not have to be at the hospital, specifically). An advanced approach involves having separate spaces for age groups (infants, toddlers, middle childhood, adolescents) and even a separate space for those children with sensory integration concerns. ○ Establish medical oversight in the Pediatric Safe Area.

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

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-6**

DOMAIN 7: LEGAL AND ETHICAL CONSIDERATIONS

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

RECOMMENDED ACTIVITY	FOUNDATION	INTERMEDIATE	ADVANCED
State Emergency Authority/Orders	○ Develop and implement a process/ protocol for Emergency Management and Hospital Counsel to alert leaders to Federal and State Emergency declarations, orders, regulatory waivers, and legislative developments.	○ Ensure participation in Regional Healthcare Coalition (HCC), which will have pediatric champions as resources.	○ Assume a leadership role in regional coalition and provide pediatric expertise to regional HCC pediatric committee participation or state emergency planning bodies.
Emergency Operation Plan(s) (EOPs)	○ Ensure that the institutional Emergency Operations Plan (EOP includes at minimum all hazards required by the Centers for Medicare & Medicaid Services (CMS); The Joint Commission (TJC), Federal and State Law. ○ Plan for the arrival of pediatric patients in All Hazards EOP.	○ EOP includes pediatric champion in place.	○ EOP includes robust planning for specialty patients in disasters; explore the need to assume regional responsibility for certain capabilities (examples include ECMO expertise; special containment units), including pediatric specialty care. Must consider legal options and consequences related to acceptance or declination of transfers related to the Emergency Medical Treatment and Actice Labor Act (EMTALA) or similar state-based laws and policies.
Policies and education regarding assent/consent	○ Ensure the EOP includes communication to first responders and receivers about basic exemptions from consent during life or limb-threatening conditions.	○ **Incorporation of Domain 6** (see page 14) Reunification processes into EOP.	○ Establish relationships with and ensure that legal/ethics experts and child protection teams are available to create plans for social support of unaccompanied children with no consenting guardian.

DOMAIN 7: LEGAL AND ETHICAL CONSIDERATIONS (Continued)

RECOMMENDED ACTIVITY	FOUNDATION	INTERMEDIATE	ADVANCED
Credentialing, Privileging and Liability Protections	○ Establish and implement EOP for emergency credentialing and privileging of volunteers and medical staff services includes plan to redeploy privileged providers to expanded scope.	○ Ensure ongoing regional healthcare coalition participation in planning for surge (especially pediatric) with strategic education and preparation of key staff such as Emergency Medicine, Family Medicine, Primary Pediatrician providers in region for potential deployment in local or regional pediatric surge. ○ Conduct regular educational sessions/ courses for Medical Staff Services and Risk Management around immunity from liability for workers, volunteers, and any licensed health care personnel practicing under expanded scope during emergency/disaster.	○ Develop and implement policies, including developing MOA's with regional partners, to deploy providers with pediatric expertise to coalition members to assist in a disaster. ○ Analyze and understand the local or regional pediatric care coordination capabilities and participate in creating pediatric surge plans for the state, including pediatric teams for deployment, addition of pediatric expertise to state or federal volunteer rosters (Medical Reserve Corp, etc.)
Crisis Standards of Care (CSC) and Scarce Resource Allocation Committees (SRAC)	○ Ensure that the institutional EOP includes a CSC plan for disaster triage and intake.	○ Ensure that the EOP includes CSC planning with specific resources from regional coalition or state to shelter in place with children until safe transfer can be achieved (focused pediatric surge planning). ○ Develop or strengthen regional partnerships ensuring availability of pediatric-specific consultation (or telehealth) with pediatric centers to coordinate transfers to avoid crisis standards.	○ Create or lead coalition development of pediatric CSC aligned with national, state recommendations and drills. ○ Advocate for and ensure pediatric CSC, legal and ethics experts in specialty centers should be Disaster Ethics/SRAC and should review and inform regional or state guidance.
Emergency Medical Treatment and Active Labor Act (EMTALA) and other federal or state laws impacted by disasters	○ Ensure a foundational understanding of EMTALA, including baseline principles such as when waivers are allowable and most importantly, what elements are modifiable in a declared disaster.	○ Establish partnerships with pediatric centers outside of normal referral patterns through participation in regional or state healthcare coalition planning to increase pediatric surge capacity with special attention to alternate referral or consultation arrangements that may be disrupted by EMTALA.	○ Assume a leadership role for advanced planning for regional sharing of resources and consultation with regional centers to shelter in place or assist in finding other accepting centers when receiving facility have reached maximum capacity.

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain–7**

DOMAIN 8: BEHAVIORIAL HEALTH

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

RECOMMENDED ACTIVITY	FOUNDATION	INTERMEDIATE	ADVANCED
Psychological First Aid (PFA) training	○ Ensure PFA training is provided to all staff and optional training on its unique application to children is readily available. ○ Ensure that PFA educational material is readily accessible online through hospital network and/or disseminated to staff.	○ Provide pediatric-specific PFA training to key clinical staff who are likely to interact with children and families. ○ Establish protocols to identify specific staff qualified to conduct screening and support during a disaster scenario.	○ Provide pediatric-specific PFA training to all hospital staff. ○ Disseminate best practices regarding pediatric-specific PFA to coalition hospitals and lead regional-wide education efforts.
Pediatric-specific Psychoeducational Materials	○ Create or acquire pediatric-specific psychoeducational materials and make them available and easily accessible to clinical staff for use in a disaster scenario.	○ Ensure that pediatric-specific psychoeducational materials are readily available to clinical staff at time of crisis and is customized to include local mental health resources in the region. ○ Ensure materials are available in all languages used by a significant portion of the population.	○ Ensure that material is routinely distributed in print and/or electronic format to impacted families (those impacted by natural disaster and/or trauma, etc.)
Behavioral health professionals	○ Identify referral resources in the community for children experiencing trauma (e.g., behavioral health specialists with expertise in trauma treatment of children) and/or loss (children's bereavement centers/camps or hospice programs).	○ Establish MOUs with qualified behavioral health professionals or create protocols for behavioral health professionals to be available on-call to provide services on-site during disasters.	○ Verify and/or ensure qualified behavioral health professionals are members of hospital staff and provide coverage 24/7/365 with ability to surge during a disaster. ○ Establish protocols to provide pediatric behavioral health tele-health capabilities to coalition facilities in a disaster.

DOMAIN 8: BEHAVIORIAL HEALTH (Continued)

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

DOMAIN 8: BEHAVIORIAL HEALTH (Continued)

RECOMMENDED ACTIVITY	FOUNDATION	INTERMEDIATE	ADVANCED
Professional self-care	○ Ensure there is an Employee Assistance Program (EAP) or other free and employer supported mechanisms that provide counseling support services are available and easily accessible for all staff. ○ Ensure healthcare providers that care exclusively for adults have just-in-time training and resources to counsel families in a disaster.	○ Provide training on professional self-care to all clinical staff, including explicit discussion of context of care during a crisis and caring for grieving and traumatized children.	○ Provide training on appropriate professional self-care to all professional staff. ○ Create and disseminate educational materials on professional self-care in the setting of a pediatric disaster to regional healthcare facilities.

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-8**

DOMAIN 9: CHILDREN AND YOUTH WITH SPECIAL HEALTH CARE NEEDS

Children and youth with special health care needs (CYSHCN) present unique considerations in pediatric disaster response, and require special attention when planning for a disaster.

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-9**

DOMAIN 10: EXERCISES, DRILLS, AND TRAINING

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

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain-10**

DOMAIN 11: RECOVERY AND RESILIENCY

It is vital to anticipate and prepare to address the needs of the community (particularly its children) after a disaster's acute phase has concluded. An effective disaster reponse includes supporting the community in recovery.

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

DOMAIN 11: RECOVERY AND RESILIENCY (Continued)

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

Find additional resources at **https://bit.ly/PedsDisasterChecklistDomain–11**

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FOR ADDITIONAL INFORMATION

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SIGNIFICANT EVENT READINESS FORUM

NATIONAL PEDIATRIC DISASTER CONFERENCE

REVIEW - 2022

National Pediatric Disaster Conference (Significant Event Readiness Forum) Review

General Overview of SERFs: The purpose of the Significant Event Readiness Event Forums (SERFs) is to provide an environment for exploring opportunities along the disaster response continuum. The SERFs are not disaster preparedness exercises, but instead are facilitated discussions to foster information sharing and relationship development. The SERFs offer a hybrid approach for bringing together a targeted group of stakeholders that do not always plan together.

For this event, Allen Clark (Director of the Arizona Division of Emergency Management, or ADEM) served as the facilitator.

Tom Shannon (Fire Chief for the City of Scottsdale) served as the conference moderator.

Arizona Department of Health Services Support: The SERFs are funded by the Arizona Department of Health Services (ADHS). Without this support, the SERFs would not be possible.

Oversight Committees: The SERF is a project of the Arizona Department of Health Services (ADHS), Arizona Division of Emergency Management (ADEM), Arizona Department of Homeland Security, Arizona Department of Education (School Safety and Social Wellness), and Arizona Health Care Cost Containment System.

For the national SERF, a national oversight committee was convened, representing a vast array of expertise. The representatives are listed in Appendix A. The Collaborative is deeply appreciative of the contributions made by each of the national oversight committee members, with particular acknowledgement of the staff and financial support by the Arizona Department of Health Services and the Pediatric Pandemic Network (PPN); the outreach by the National Pediatric Disaster Coalition (NPDC); the logistical support by the Arizona Department of Emergency Management (ADEM); the sponsorship of the Arizona Coalition for Healthcare Emergency Response (AzCHER); the scenario development and other guidance offered by the California Emergency Medical Services Authority (EMSA) and California Patient Movement Plan Contractor; and the regional and national military partners.

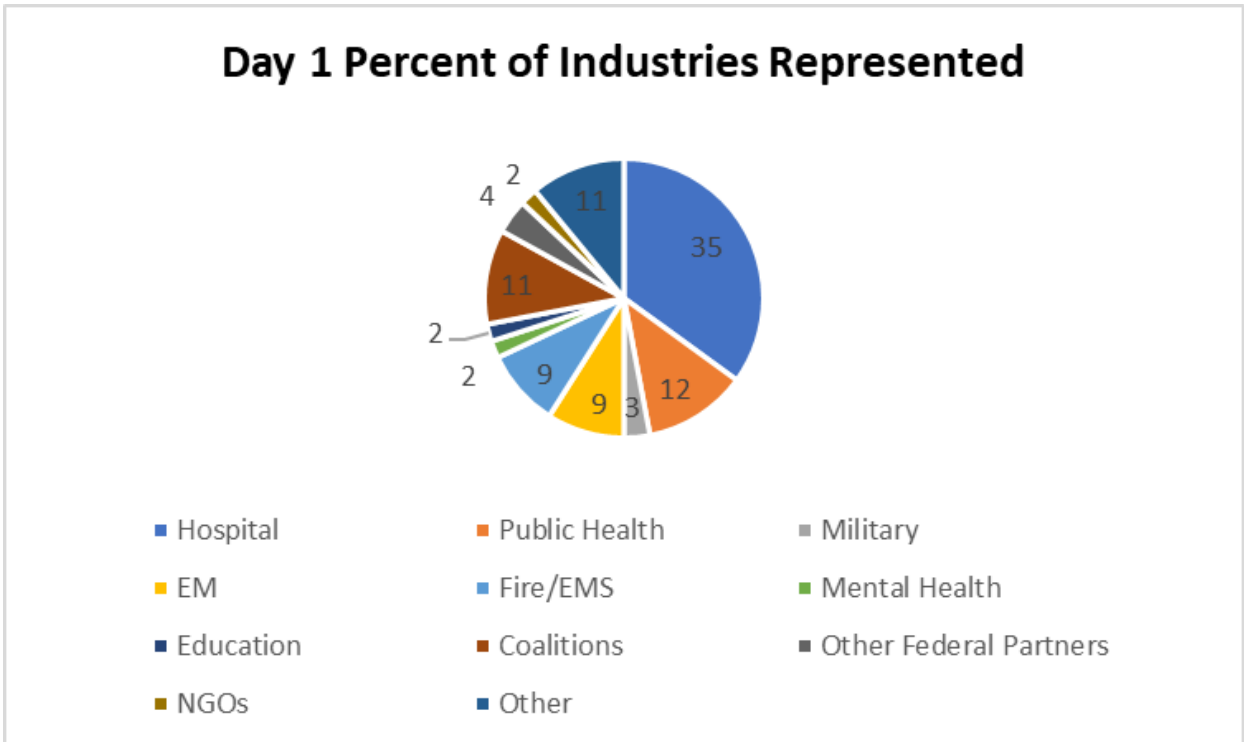
SERF Details: The SERF was held on October 27 and 28, 2022, from 8:00AM to 3:00PM. The event was originally designed to be an in-person conference held at WestWorld in Scottsdale. Due to an anticipated elevation of pediatric patients in hospitals (flu and COVID), a decision was made to move the conference to Zoom. However, presenters and staff met at the Arizona State Emergency Operations Center (SEOC) at 5636 E McDowell Rd, Phoenix, AZ 85008 for coordination purposes.

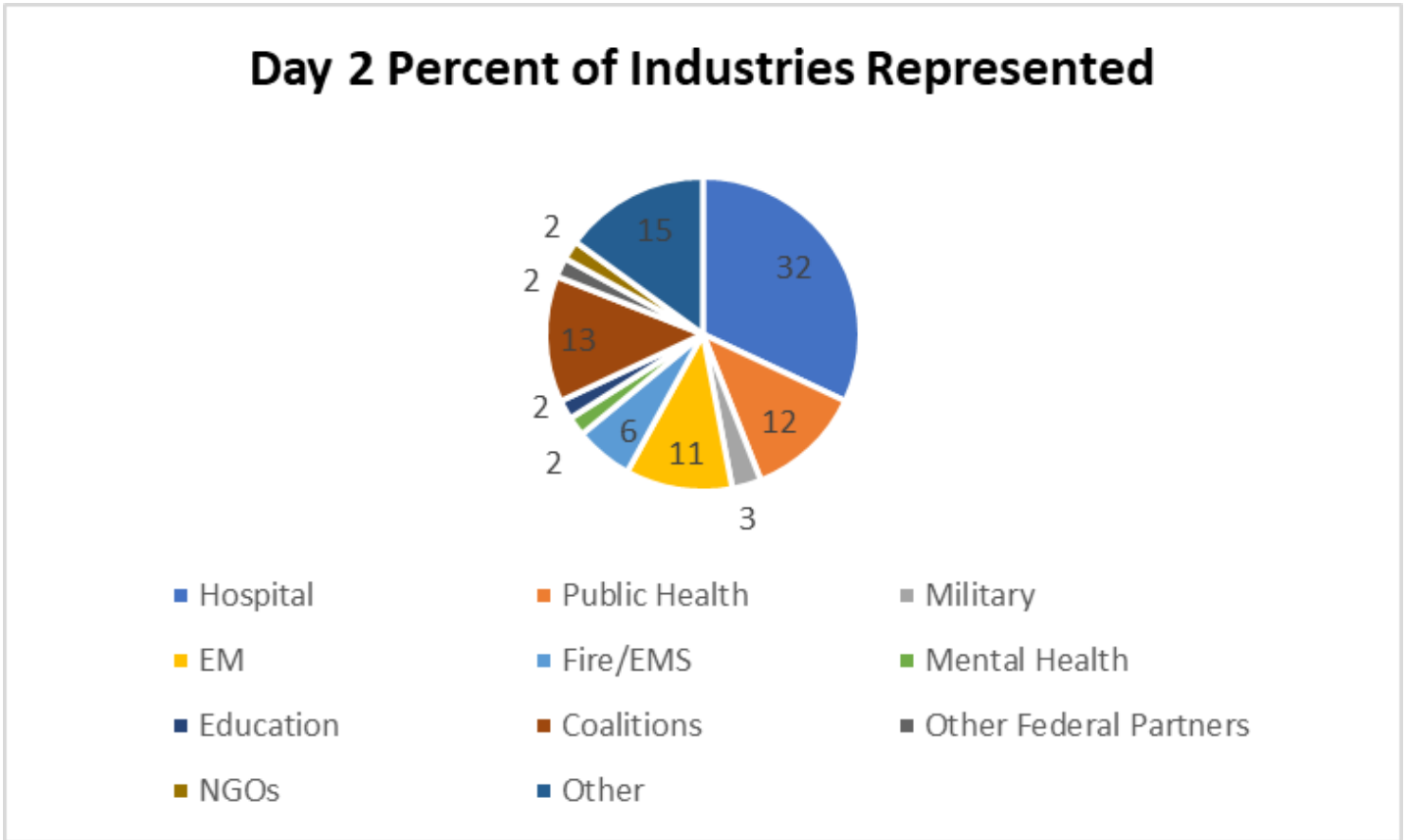
A total of 301 individuals registered for the event. Due to pediatric surges across the nation, numerous registrants notified the Collaborative that they would not be able to attend. Most of the absentees were from hospitals or public health.

Since the event was primarily on Zoom, it was already anticipated that multiple people would use one registration to access the log-in information. A total of 331 people were on the Zoom meeting, and another 29 were at the Arizona SEOC. The total number of participants was 351.

The table below identifies attenders by industry of those attendees who could be captured by industry. The industries represented are also displayed on the two pages that follow.

Industries Represented Each Day	Day 1	Day 2
Hospital	74	49
Public Health	26	19
Military	7	4
EM	19	17
Fire/EMS	19	10
Mental Health	3	3
Education	3	3
Coalitions	24	20
Other Federal Partners	9	3
NGOs	4	3
Other	23	24
Totals	211	155


Day 1 Percent of Industries Represented
35
12
3
9
9
2
2
11
4
2
11
Hospital
Public Health
Military
EM
Fire/EMS
Mental Health
Education
Coalitions
Other Federal Partners
NGOs
Other


Day 2 Percent of Industries Represented
32
12
3
11
6
2
2
13
2
2
15
Hospital
Public Health
Military
EM
Fire/EMS
Mental Health
Education
Coalitions
Other Federal Partners
NGOs
Other

Objectives:

The Goal of Day 1 was to establish a framework for understanding command structure(s) and situational awareness as well as to determine first responder, private sector, and military staging, triage, and transport of pediatric.

Day 1 Objectives:

1. Improved understanding of California's local and state command structure(s), situational awareness, resources, limitations, and resource distribution; and

2. Improved understanding of first responder, military, and private sector staging, triage, and ground and air transport (including routes).

The Goal of Day 2 was to identify legal and mental issues and clarify hospital pediatric evacuation needs, considerations, resources and resource coordination, communications, reunification, and challenges.

Day 2 Objectives:

1. Improved understanding of legal and mental complexities of hospital interstate evacuations during a catastrophic incident.

2. Improved understanding of healthcare capacity status identification, hospital needs assessments, communication strategies, and essential elements of information collection during a catastrophic incident.

3. Improved understanding of the transfer of patient information among healthcare systems during a catastrophic incident.

4. Improved understanding of patient tracking in healthcare systems and agencies supporting family reunification during a catastrophic incident.

5. Improved understanding of hospital pediatric patient reception best practices and challenges during a catastrophic incident.

Scenario Framing the Event:

Thursday, October 20, 2022, at 2:12PM a magnitude 7.7 earthquake hit Southern California. The epicenter is located near downtown Riverside, California. Multiple aftershocks are still being experienced. **The conference is focused only upon the first 24 hours following the event.**

Reports indicate:

- There are mass electricity outages in Riverside, Orange, Los Angeles, and San Diego counties.
- Cell towers are overloaded and/or non-operational.
- Fresh water and sewers have been compromised in the areas directly impacted by the earthquake.
- There are multiple gas line fires and explosions, with significant injuries being reported.
- Many highways and roadways are not accessible north and east of the epicenter due to surface damage, serious accidents, and congestion.

Reports indicate:

- San Bernadino and Riverside airports are non-operational, due to structural damage, and traffic is being diverted.
- All other Southern California international and municipal airports are limited to emergency flights only, but operational.
- The sea ports of Los Angeles, Long Beach, Newport Bay, Dana Point, Oceanside Harbor and San Diego Harbor are reporting operational, but diverting incoming traffic.

Reports Pertaining to Healthcare (perinatal, neonatal, and pediatric population, including those with access and functional needs) indicate:

- A significant number of hospitals in Los Angeles, Orange, Riverside, Southwest San Bernardino, and San Diego counties have reported structural damage, electrical, HVAC, generator, and water outages, and may need to evacuate.
- Numerous California hospital capacities, blood, supplies, and resources are severely depleted and must send some patients out of state; they can't decompress any more.
- Children's Health of Orange County and Loma Linda University Children's Hospital are on fire with significant injuries, many with burns; these hospitals are evacuating.
- An overwhelming number of local victims are arriving at hospitals in California via private vehicle (some are walking wounded, while others are presenting with serious injuries).
- Impacted hospitals have "recalled" staff but are reporting an average of 25% response rates.
- ***Hospitals in states adjacent are triaging patients and sending them east; they are overwhelmed with surges and are anticipating the need for additional resources and supplies.***

National Pediatric Disaster Conference

California Inpatient and Outpatient Facilities on All Fault Lines

Program: The final program list of speakers is listed below. Each presentation submitted is available for download at https://coyotecampaign.org/pediatric-conference. Presentation summaries will not be repeated within this document.

Thursday, October 27, 2022, Speakers on Transport

8:00AM to 8:15AM: ***Welcome***, Teresa Ehnert, Director, Bureau of Public Health Emergency Preparedness, Arizona Department of Health Services.

8:15AM to 8:45AM: ***Opening Remarks***, Dr. Meg Sullivan, Chief Medical Officer, MD, MPH, Administration for Strategic Preparedness and Response (ASPR) and Dr. Michael R Anderson, MD, MBA, FAAP, FCCM, FAARC, Senior Advisor, ASPR.

8:45AM to 9:00AM: ***Significant Event Readiness Forum Summary (SERF), Scenario Review, and Day 1 Objectives***, Chief Tom Shannon, Scottsdale Fire Department and President, Arizona Fire Chiefs Association.

9:00AM to 9:30AM: ***California Local and Regional Medical/Health Coordination (presentation title pending),*** Jeremy Fahey, Senior Disaster Services Analyst, Los Angeles County EMS Agency, Region I Regional Disaster Medical Health Specialist, Los Angeles, Orange, Ventura, Santa Barbara, San Luis Obispo counties.

9:30AM to 10:00AM: ***California State Medical/Health Coordination Resource Coordination,*** Craig Johnson, Chief, Disaster Medical Services Division, State of California Emergency Medical Services Authority.

10:15AM to 10:45AM: ***Arizona Staging, Triage, and Transport Routes,*** Chief Scott Freitag, Central Arizona Fire and Medical and Past President, Arizona Fire Chiefs Association.

10:45AM to 11:15AM: ***Military Assets, Activation Requirements, and Limitations Panel:***

- Ms. Janine Hollenbeck, Defense Coordinating Element, Region IX Chief of Plans (Moderator),
- Lt Col Todd Canale, Emergency Preparedness Liaison Officer to Arizona (Air Force),
- Lt Col Ryan Gabel, USNORTHCOM Region IX Medical Plans & Operations Officer, and
- Mr. Robert Gonzales, Senior National Security Law Attorney, USARNORTH.

11:15AM to 11:45AM: ***Airline Assets, Activation Requirements, and Limitations,*** Chris Rausch, Emergency Manager, Phoenix Sky Harbor International Airport.

12:45AM to 2:15PM: ***SERF Discussion,*** Allen Clark, Director, Department of Emergency and Military Affairs, Division of Emergency Management.

2:15PM to 2:30PM: ***Evaluation and Next Steps,*** Chief Tom Shannon, Scottsdale Fire Department and President, Arizona Fire Chiefs Association.

Friday, October 28, 2022, Speakers on Evacuation

8:00AM to 8:15AM: ***Welcome, Scenario Review, and Day 2 Objectives,*** Chief Tom Shannon, Scottsdale Fire Department and President, Arizona Fire Chiefs Association.

8:15AM to 8:45AM: ***Assessing the Emergency Legal Environment: Real-time Issues and Resolutions,*** Prof. James Hodge, JD, LLM, Peter Kiewit Foundation Professor of Law; Director, Center for Public Health Law and Policy; and Director, Western Region - Network for Public Health Law

8:45AM to 9:15AM: ***Pediatric Crisis Standards of Care,*** Dr. Chris Newton, MD, Trauma director at UCSF Benioff Children's Hospital, Oakland; Principal Investigator, the Western Regional Alliance for Pediatric Emergency Management; and Co-Principal Investigator, the Pediatric Pandemic Network.

9:15AM to 9:45AM: ***Key Behavioral Health Considerations for Initial Disaster Response: You can't wait for Recovery,*** Dr. David J Schonfeld, MD, FAAP, Director, National Center for School Crisis and Bereavement, Children's Hospital Los Angeles and Professor of Clinical Pediatrics, Keck School of Medicine.

9:45AM to 10:15AM: ***California's Pediatric Patient Movement Plan,*** Dr. Rick O. Johnson, MD, MPH, Pediatrician, Health Officer, and Medical Health Operational Area Coordinator, Alpine County, California and Pediatric Surge Plan Contractor, California Department of Public Health.

10:30AM to 11:00AM: ***Health Information Portability in Disasters: What We Have and Where We Are Going,*** Dr. Cullen Clark, MD, Attending Physician, Emergency Medicine; Director of Disaster Preparedness, Division of Emergency Medicine, Nationwide Children's Hospital; and Assistant Professor of Clinical Pediatrics and Emergency Medicine, the Ohio State University College of Medicine.

11:00AM to 11:30AM: ***The Hospital Reception Site Template: Addressing the Challenges of Hospital Reception during Disaster***, Dr. Anna Lin, MD, Clinical Associate Professor, Division of Pediatric Hospital Medicine, Stanford University; Pediatric Hospitalist, Lucile Packard Children's Hospital Stanford; and Assistant Medical Director, Office of Emergency Management, Stanford Children's Health and Stanford Health Care.

11:30AM to Noon: ***Patient Tracking: The Critical Data needed for Reunification***, Kevin M. McCulley, Chief Operations Officer, Pediatric Pandemic Network, and David McCarthy, Arizona Coordinator, Western Regional Alliance for Pediatric Emergency Management; Drills & Exercises Project Manager, Pediatric Pandemic Network; and Member, Hospital Incident Command System National Advisory Committee.

1:00PM to 2:30PM: ***SERF Discussion,*** Allen Clark, Allen Clark, Director, Department of Emergency and Military Affairs, Division of Emergency Management.

2:30PM to 2:45PM: ***Evaluation and Next Steps,*** Chief Tom Shannon, Scottsdale Fire Department and President, Arizona Fire Chiefs Association.

Recap of Discussion: The SERF summaries of the discussions are reported by industry and presented in chronological order of discourse.

Day 1 Recap:

Facilitator: What is the command and communication structure?

California EMSA: The State Operations Center (SOC) and State Medical Health Coordination Center (MHCC, or medical "arm" of the SOC) would be activated. California EMSA would manage transport decisions. The California Office of Emergency Services (OES) would be at the SOC. The California OES is the State lead for disaster response and will activate the SOC, including the Emergency Support Functions (ESFs).

Intel from news outlets with social media and agency situational reports from impacted regions would be crucial. Next, planning would occur to respond to resource requests, such as strike force teams and triage support. The SOC and the MHCC would gather situational reports and work to meet statewide needs, such as deploying medical teams, Ambulance Strike Teams, and other resources to support local requests.

The operational area coordinators would connect with the impacted medical facilities for each county to obtain needed information. This would be relayed to the SOC. California EMSA would begin to pre-stage resources. The state would reach out to federal partners for resources, and the Governor's Office would be kept informed of progress.

Facilitator: When California knows patients must be moved, how will other states be notified? Does California OES have a communications' plan for reaching other states? Would the Emergency Operations Centers (EOCs) from California reach out to the other state EOCs?

COVID taught the states how to use contracts for medical support. If volunteers are sent across with pediatric patients to other states, how would we legally cover them to travel? Are they under an Emergency Management Assistance Compact (EMAC) system? Have we thought about that?

California EMSA: California was able to approve over 75,000 out-of-state medical professionals to work in the state to support medical facilities. Additionally, California utilized the Disaster Healthcare Volunteer system to deploy over 7,000 local medical volunteers. Volunteers are sworn in as Disaster Service Workers for liability protection. California EMSA also bolstered the California Medical Assistance Team (CAL-MAT) program by increasing the number of members from under 200 to nearly 2,000 during the peak of COVID. When activated, CAL-MAT members become state employees and are provided the necessary liability coverage to care for patients.

Facilitator: What would other states seek from California?

Arizona Department of Health Services' (ADHS) Bureau of EMS and Trauma Services: Communications would go through region IX coordination.

ASPR Region IX Regional Emergency Coordination: ASPR can help coordinate between states, but the primary mechanism for one state to request assistant from another is Governor to Governor through EMAC.

ADHS Bureau of Public Health Emergency Preparedness: We would need to access bed polls.

It is important to remember that the receiving hospital will manage discharge. Going across state lines is complicated. Obstacles were observed during Katrina pertaining to the return of patients once they were discharged from other states to return home (who pays?).

Facilitator: The National Disaster Medical System (NDMS) emerged as a topic this morning. NDMS does not seem to have much support for pediatrics.

Military: The Department of Defense is not equipped or trained for pediatric transfers. NDMS is funded primarily for patients ages 18 and over. There are some pediatricians and experts with women's health.

ASPR Region IX Regional Emergency Coordination: Once the FEMA ambulance contract is activated with American Medical Response (AMR), assets will begin to arrive within 18 hours. This includes 25 aircraft and 300 ambulances (60/40 ALS/BLS). By 36 hours, all of these assets should have arrived at their staging areas.

Facilitator: Ambulances may not be able to get through due to congested highways and bridges. What are the "aha" moments that go through your minds?

Los Angeles County EMS Agency, Region I Regional Disaster Medical Health: The damage would only go so far. Maybe we do a chain of custody ambulance to the airport. Maybe we explore a mid-way solution (leapfrog transports). The Coast Guard, National Guard, and other military partners could be used, but it "comes down to the familiarity with pediatric patients.

Facilitator: There would be a federal declaration and – for the military – Immediate Response Authority would be enabled. What is the National Guard availability? Should we consider having the National Guard in EOCs?

California EMSA: The SOC convenes the Unified Coordination Group for senior-level decision making and resource allocation. The California National Guard has a seat at the table. In coordination with the California OES, the governor can activate the National Guard in California.

Facilitator: Local EMS would not be available as they would be busy responding to emergencies in the state. Would California have enough resources to deal with the situation on its own?

Los Angeles County EMS Agency, Region I Regional Disaster Medical Health: Ingress and egress would be disrupted. Damage will not impact the whole state, however. Regional airports could be tapped to move patients.

Facilitator: Would patients be moved to outer areas of California for ease of transport via aircraft? For example, could Palm Springs serve as a patient distribution center?

Los Angeles County EMS Agency, Region I Regional Disaster Medical Health: There are limited air resources. Some air resources may be able to transport, but utilization would require significant changes to accommodate pediatrics.

International Association of EMS Chiefs (IAEMSC): Pediatric patients with pre-existing health conditions – pediatrics on ventilators, for example – would require specific types of equipment. Furthermore, they would need to go to hospitals that could manage the health conditions (some hospitals may not be able to do this). There would also need to be special needs Where would these be? Pertaining to the bed-bound, adult patients would add to the stress on response and care.

California just stood up a Children's Health Insurance (CHIP) project, a pilot project conducted by ASPR (in partnership with CMS), which is similar to emPOWER, but which includes children's information pertaining to at-risk populations. The pilot provides guidance and technical assistance to help states and territories create emPOWER datasets from their state-operated Medicaid and CHIP data. The CHIP Data Pilot Project helps communities better anticipate needs and the health of children based upon their specific access and functional needs.

Buses could work for some of the population, but not for others. For instance, there are pediatrics on investigative therapies; how could these trials be continued when the patients are transferred to other hospitals? How would the investigators get access to the data needed or would there need to be a decision to stop the therapy?

Some EMS have supplies and assets to address pediatrics, while others may not.

During Katrina, a courtesy call was made to FEMA to notify the agency that private transportations resources would be used to evacuate Tulane University. FEMA said "no." However, the solution worked and the site was evacuated in less than 24 hours. We need to explore when private transport services can and cannot be used.

Lessons learned from COVID demonstrated that 80 percent of the resources received from state and federal government were administrative or were contracted resources. Some of the resources were hospital employees who left the hospitals to work with a contracted service provider. We need to have a better understanding of the national assets available and where they're coming from.

Some of the hospitals in California have transport contracts that would assist them in moving patients.

The Strategic National Stockpile (SNS) has not been replenished from COVID surges. Also, some of the SNS resources didn't work when these were received.

Facilitator: When Arizona activated the National Guard, we found that we were "pulling" nurses and doctors from hospitals that already needed their help.

Under Incident Command, rotary and fixed-wing assets could be availed, but who would coordinate all of the air assets as well as the landing zones?

Scottsdale Fire Department: The Department of Fire and Forestry Management is best at managing aircraft, and they are mobile. From a rotary air asset point, wildland can manage the aircraft. There are not a lot of fixed-wing assets pertaining to fire departments, except for those used for fire suppression.

Tempe Fire Department: In urban areas, this is accurate.

Facilitator: Is there any "body" that could manage all of the aircraft (military and civilian assets)?

California EMSA: The California SOC has an air group that can be stood up during emergencies. The military would participate in the group.

Military: If the FAA needs assistance, the Department of Defense could manage the aircraft. The challenge is that there are very limited capacities pertaining to communications between military and civilian aircraft; the two don't talk to each other.

Scottsdale Fire Department: Is there a common Department of Defense radio frequency that could be used in this type of scenario?

Military: There is a radio frequency the military can go to in a disaster.

However, it is not that simple to write a process. An exercise was conducted in San Francisco that looked at civilian landing of a marine helicopter. There were a lot of lessons learned.

ASPR Region IX Regional Emergency Coordination: Another thing to consider is when stars like John Travolta device to fly in their own private aircraft into the area for transport.

Facilitator: It appears there must be military and civilian aircraft coordinators sitting next to each other to facilitate the communications.

Is there a common radio frequency that could be used to connect the two? While there isn't a protocol to do this yet, wouldn't that be valuable?

Military: There would be more to it than that. However, this task is something that can be worked on.

Other countries will want to take patients back to their own countries. That means there would be even more aircraft involved.

ADHS Bureau of Public Health Emergency Preparedness: We learned that the embarkation piece needs and ambulance and triage as well as communications established. From hurricanes, we learned that premature babies are not easily moved; they take a lot of resources. When there are pediatric patients with tubes and other equipment/supplies required, there is tremendous stress on the children.

The Family Assistance Centers will be crucial in helping with this. Resources like the Ronald McDonald houses would be important to have. There are certain common themes, but there are issues that aren't fixed yet.

Facilitator: There are a lot of charitable organizations that may be accessed to help, such as the Red Cross.

National Pediatric Disaster Coalition (NPDC): With all of the road closures, we need to consider pediatrics in incubators and how we are going to bring neonatal assets to local (and safe) areas in California. Locations need to be identified in close proximity to the disaster for triage and care. We also need to understand the pediatric assets and subject matter experts that would be available to support these sites (triage, transport, staging areas, communications and dispatch management).

In the Haiti response – and we're talking about thousands of children who needed medical care – Israel established a field hospital somewhat near the disaster site. This field hospital gave life-saving

care before transport occurred. The Israeli model is worthy of consideration for replication pertaining to the siting of field hospitals.

Facilitator: How do we track the patients? Could a civilian be on a military aircraft?

Military: Let's not look at exceptions as we figure this out, so we have a baseline to start from.

Facilitator: Who would have thought we would use military assets during COVID? COVID opened our eyes to see there are opportunities to explore the military in discussions about other disaster response support.

Military: It may be prudent to add a military nurse to transports using military aircraft. However, this wouldn't be likely, and we need to be prepared for if a civilian nurse shows up with a pediatric patient.

Currently, the Department of Defense brings outside resources in the back of a C130 aircraft. However, providing medical support is a bit different (unique training and skill set).

Facilitator: Maybe we look at a military training program to enable education of the military on pediatric patients.

Military: The key is to engage elected officials in the discussion.

Credentialing was an issue during COVID for the military. However, there is a quick fix if we place a pediatrician on the military aircraft.

Day 2 Recap:

Facilitator: What comments does anyone have regarding this morning's legal presentation?

Dr. Rick Johnson (Contractor for the California Pediatric Surge Annex): There is more awareness of legal protections for Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP). Prof. Hodge has been an incredible legal advocate.

Tempe Emergency Manager: There is an opportunity to establish new relationships with the legal information presented.

Pediatric Pandemic Network (PPN): Many lessons were learned about the intersection of state public health, emergency management, executive branch, and legislative branches during the COVID response. We must continue to engage elected leaders during preparedness activities, be they planning, training, or exercising.

National Center for School Crisis and Bereavement: The audience seemed a bit surprised by the legal findings presented by Prof. Hodge. Perhaps it would be a good idea to distribute his presentation to hospitals across the nation.

Facilitator: Perhaps there should be a "Roadshow" presenting all of the legal protections. It seems that interstate movement of volunteers is covered legally.

Western Regional Alliance for Pediatric Emergency Management (WRAP-EM): The legal findings from Prof. Hodge may be found on the WRAP-EM website at: https://wrap-em.org/.

National Center for School Crisis and Bereavement: Is there a way we can ensure people have access to this document? Can the Administration for Strategic Preparedness and Response (ASPR) require "sign off" by hospital leaders pertaining to reading the information?

Pediatric Pandemic Network (PPN): Many services may be restricted due to lack of knowledge about the legal protections.

ASPR Region IX Regional Emergency Coordination: Perhaps we can start by distributing the information throughout Region IX. Then we can look at other regions of the nation.

The Emergency Management Assistance Compact (EMAC) system provides protections.

Dr. Rick Johnson (Contractor for the California Pediatric Surge Annex): ESAR-VHP provides liability coverage when there is a declaration.

ASPR Region IX Regional Emergency Coordination: A declaration may be the solution.

Facilitator: Arizona State University had EMT students help with vaccinations during COVID through an authorization by the Arizona Governor.

ASPR Region IX Regional Emergency Coordination: During the pandemic, the State Health Officer issued an order that allowed the state to move patients in an effort to load-level once that particular region reached specific criteria, particularly ICU bed capacity.

California EMSA: Approximately 75,000 out-of-state professionals were approved to be sent to California during COVID. For a large-scale event, we could do this again.

Facilitator: The military may not be available for 72 hours. It may take this long to secure out-of-state workers through EMAC.

Los Angeles County EMS Agency: The Mercy ship wouldn't take COVID patients. Thus, medical staff were assigned from the ship to hospitals. Alternate care sites don't work so well.

Military: Military hospital ships need time to get ready. Also, military staff for the hospitals are "pulled" from civilian hospitals/other jobs. It would be better to have military medical professionals sent to the hospitals as long as the hospitals are safe and stable. Generators, potable water, and other resources may be sent to hospitals to keep them operational.

National Center for School Crisis and Bereavement: Given the scenario, flight resources may be needed for other reasons. Furthermore, bringing in too many volunteers could cause problems. Maybe it's better to take the time needed to determine exactly what resources are needed.

Facilitator: Keep in mind that the scenario is focused upon the first 24 hours following an earthquake. Hence, we're mainly looking at response. Planning should be occurring simultaneously to response.

Dr. Rick Johnson (Contractor for the California Pediatric Surge Annex): We're talking about life-saving care that may be provided by non-medical individuals. Perhaps we need to begin training the communities in advance on such strategies as Stop the Bleed.

Facilitator: Let's transition into a discussion about mental health, focusing upon we're doing as organizations to help our own people. How do we support first responders/recipients and their families so they are able to work effectively? How do we keep the work force healthy during an incident?

David Geffen School of Medicine at UCLA: It is timely to mention impacts on the work force with the NDMS teams deployed to Florida; there are a lot of ASPR resources on the ground.

There have previously been efforts to explore the impacts of significant distress to staff, which caused impairments on their abilities to perform needed functions. We need to plan in advance to support immediate as well as long-term mental health needs. WRAP-EM is working on a plan – "Anticipate, Plan, and Deter" – to do this.

The first responders and hospitals in the scenario will need to be assessed regarding mental health.

Also, the level of traumatic injury of each child may cause mental health needs. Yet, the mental health system for kids in the nation is already in crisis. We will need to focus on population-based care. Perhaps the optimal strategy is to use a "neighbor-to-neighbor: model for checking mental health needs in such an incident. FEMA offers a model: "Listen, Protect, and Reflect."

We need to get people to understand the level of impact regarding food supply, water, access to acute healthcare, hazardous materials, as well as mental health. Training on Stop the Bleed and immediate psychological needs is a start.

National Center for School Crisis and Bereavement: The same basic needs must be provided to the families of healthcare workers and first responders.

Facilitator: It is crucial we take the same basic needs for hospital workers and their families while waiting for other resources to arrive.

We will have a reduction in the work force due to personnel being incident victims. How do we build plans to keep our working staff healthy? How do we manage shift rotations and so forth without running staff into the ground?

Dr. Rick Johnson (Contractor for the California Pediatric Surge Annex): What is the first thing that a worker will need? Food, water, restrooms, shelter, a hug, a pat on the back. The worker needs during the first 24 hours are very basic. The neighbor-to-neighbor concept works; that's where mental health starts.

PPN: We need to ensure that someone is there to tell staff to stop and take a break.

Facilitator: Whose responsibility is safety? It is everyone's responsibility to ensure that the team is safe and to tell staff to stop and go home, as necessary, so they aren't worked into the ground.

WRAP-EM: Within the plan that is developed, human resources and occupational health should be considered.

National Center for School Crisis and Bereavement: With communications being problematic, it will be important to assign staff to check on families.

Facilitator: There may need to be runners who check addresses to assure staff their families are okay. Another option may be the satellite phones, which would need to be distributed. We may need to go "horse and buggy."

NPDC: The neighbor-to-neighbor approach is a great idea. It is good to keep as many children as possible close to their homes. The hospitals in the scenario could evacuate to parking lots, but then what?

Ambulances don't have universal adaptors for equipment to accommodate pediatrics.

Often, where pediatrics are transported is determined by informal relationships already present among hospitals.

How do we get together after this conference to develop plans to support what we've talked about (interoperable functions, resources, legal protections, and more)? How can we glean from other disaster findings to create models?

Facilitator: We can strategize about low-hanging fruit and then explore needed legislation. We need to strategize about supporting the type of scenario offered for the conference and similar types of events requiring interstate transport/evacuation as well as engagement of political partners and local agencies. Who will drive this initiative?

Tempe Emergency Management: Tempe is working on a new bystander engagement training curriculum. This training will help civilians understand what to expect when talking with first responders as well as training the civilians on basics in tourniquet and gauze use and first aid. We need to work with the businesses in the community; what can they bring to the table?

Facilitator: Businesses will need to be brought in right away to assist with the response as they have the food, water and other resources needed. The food must be managed so that only what is needed is requested. Similarly, there will be many resources sent that will need to be managed. Compensation of businesses for resources offered in a catastrophic event should be considered now as planning occurs.

Regarding systems and data, how do we protect people's privacy and information, but also conduct patient tracking?

PPN: PULSE (Patient Unified Lookup System for Emergencies) may be most applicable (web-based program). If electronics are out, the Electronic Medical Record-keeping can't be used. But web-based information can be accessed rapidly.

California EMSA: California has some experience with PULSE. The California Emergency Assistance Teams used the system at shelter sites. They didn't really use PULSE as effectively as they could have, but it's likely a different strategy will be examined for use.

Tempe Assistant Fire Chief: Tempe is creating a comprehensive plan to respond to disasters. During the Las Vegas shooting, approximately 50 percent of the victims self-transported or went to hospitals in vehicles other than ambulances.

Alarm rooms must alert hospitals, emergency managers (EMs), and medical examiners (MEs) early through text and other systems rapidly during a Mass Casualty Incident (MCI). The alert should denote the nature of the event, the population impacted, and location of the incident. A second alert will be sent to the hospitals, EMs, and MEs office when victim number estimates are known. Then the hospitals can stand up their Emergency Operations Centers and prepare their emergency rooms for the surge. EMs can stand up the EOC and activate appropriate resources.

The Tempe plan will evolve Emergency Call Centers and Family Reunification Centers to help in large disasters. In addition, two fire department companies and battalion chiefs will be sent to hospitals to help with triage and stabilization of patients. The Battalion Chief will serve as liaison to Command.

Photo identification coordinators ("PICs") will be sent to the hospitals as well to take photos of victims as they arrive. Unique identifiers assigned will be taken with the images of the victims. The information will be uploaded to encrypted SharePoint sites that will include spreadsheets with other reunification information. A public facing site would be activated for family and friends to upload photos of those they are looking for with name, age, identifying markers, and emergency contact information. A number to call and location for the family reunification center will be provided for reunification purposes. The photos will be matched by a reunification team to identify which hospital victims are located at.

Deployable reunification teams (humane society, Red Cross, and others) will be established and will need to be tapped to set up reunification sites across the Valley. These entities will be responsible for set-up and maintenance of the reunification site in coordination with a local reunification coordinator.

All of the planning occurring among Tempe, other communities in the Valley, Maricopa County, and the state relies on the concept of "simple, realistic, feasible, interoperable, and cost effective".

Facilitator: With communications' technology out, ham operators may be needed.

National Center for School Crisis and Bereavement: Kids will be wandering around on the streets unaccompanied.

Tempe Assistant Fire Chief: Family Reunification Centers (temporary operations until Family Assistance Centers are activated) must be able to accommodate the unaccompanied minors.

Facilitator: Consider working with schools and universities to identify individuals who can assist with taking care of the unaccompanied minors in the Family Reunification Centers.

Tempe Emergency Management: The Tempe planning team is looking at sending law enforcement or contracted security to hospitals for the purpose of assisting with the perimeter protection and to alert families about where to go to find Family Reunification Centers.

WRAP-EM: Hospital Reception Sites must be integrated into community planning. The resources sent to hospitals may not be what they need. Many hospitals do not have reunification plans; we need to help them.

Tempe Assistant Fire Chief: The Tempe planning teams include hospitals and many other partners. There are childcare providers within cities who have already had background checks.

WRAP-EM: Families should also be included in these discussions. Representatives from Family Networks should participate in planning discussions. Public perception about the role of hospitals in disaster is discrepant with what the hospitals can and should actually provide. Resetting these expectations must include community partners. Community partners can help reset messaging.

Tempe Assistant Fire Chief: We will garner input from the community. We can always strive to do better. It is important to understand emerging technologies.

Arizona Coalition for Healthcare Emergency Response (AzCHER): During such an incident, AzCHER would provide situational awareness and could help with the early alert process to hospitals from the alarm rooms. AzCHER can also help with resource sharing through their MOU (some resources can be deployed within the first 24 hours). AzCHER would develop an Incident Action Plan (IAP) to identify priorities for Arizona healthcare facilities and hospitals to focus on activating their surge response plans and assessing pediatric capacity. This helps create a common operating picture and ensure federal ASPR Region IX and ADHS information is shared at the local level.

Dr. Rick Johnson (Contractor for the California Pediatric Surge Annex): We have been focusing on moving patients across state lines. We need to move staff and resources into California.

Also, the people who make transport decisions every day should be making the decisions about transport in the scenario offered.

American Medical Response: Non-critical patients can be moved out of state.

Tempe Emergency Management: We need to be conscientious about what we're doing by moving patients out of state. There are mental health considerations.

WRAP-EM: A child was sent out of state from the Stanford Center. During a recent hospital decompression effort, we had to send multiple patients across state lines and, at times, outside of the region. An evacuation of a single pediatric center will require patient movement across state lines and potentially out of a federal region. In this scenario, we are evacuating more than one children's hospital, and this will require a national movement plan for pediatric patients.

Considerations for Improvements: The discussion noted above contains many insights. Some overall considerations listed below pertain to the information shared.

1. Develop and test plans for interoperable interstate communications, coordination, and response during the onset of a catastrophic incident. **State and regional Emergency Management, military partners, first responders, and private sector (airports, mass transit, Department of Defense contractors, and others, as applicable).** This should include identification of:

    a. A pre-identified radio frequency for use by the military and first responders.
    b. Aircraft pediatric transport management:
        - Coordination responsibilities,
        - Viable aircraft,
        - Needed equipment and supplies, and
        - Staffing (is it better to use military nurses on military aircraft or is it better to send a nurse who is familiar with the patient?).
    c. Chain-of-custody ambulance transport to airports determined to be safe for operations.
    d. Mid-way and/or border triage, stabilization, and transport staging sites as well as field hospitals. Identify who will staff these as well.
    e. Integration of National Guard, Active Duty, and Reserve representatives in the state emergency operations centers.
    f. Medical asset de-confliction strategies (e.g., will anyone really benefit if doctors and nurses are deployed away from hospitals to serve in military responses?).
    g. Interaction with incident management teams to deter deployment of unnecessary assets; and
    h. Lessons learned from the Israeli response to the Haiti disaster.

2. Clarify liability coverage for volunteers crossing state boundaries for response. Also, distribute the legal document created by Prof. James Hodge to all hospitals (currently found at: https://wrap-em.org/). Develop a strategy of incentives for hospitals to sign off integrating findings. **ASPR.**

3. Create an environment to support military training and response for pediatric injuries and transport. This will require legislative involvement and funding, but it is a gap that has not been successfully addressed. **NACCD.**

4. Determine a funding source for pediatric patients to return from hospital destinations (repatriation) once the patients are stabilized and able to return home (applies to non-federally transported cases; NDMS does not transport pediatrics at this time). This cost should not be borne by hospitals (deters reception of patients and was counterproductive during Katrina; this is a lesson learned that has not been addressed). **ASPR (to FEMA), NACCD, and the centers for pediatric excellence.**

5. Identify pediatric equipment funding for EMS and distribute funding (for equipment and supplies), potentially using caches sited in hubs across a state. For example, universal adaptors for pediatric patients may be needed. Ensure there is accountability in spending. **NACCD.**

6. Create a strategy to ensure the assets needed are available and operational. For example, the SNS resources must be resupplied**. ASPR.**

7. Identify a national standardized system of determining the pediatric patients who can be moved versus those who should not be moved (in-hospital triage). **EMSC.**

8. Ensure all facets of reunification are planned, able to be staffed, and tested. These must be able to accommodate the unaccompanied minors. **NACCD**. Elements should include:

    a. Hospital Reception Sites,
    b. Family Reunification Sites,
    c. Family Assistance Centers, and
    d. Emergency Call Centers.

    As a resource, consider contacting the Tempe Emergency Manager for reunification models. Also, go to the WRAP-EM site for the Hospital Reception Site model. **PPN**.

9. Create an incentive for hospitals to work together pertaining to resource sharing, patient transport among different hospital systems, and more. The financial incentives – such as hospital support for emergency management, training, and exercises – were lost in parts of the country when ASPR discontinued full funding to the state health departments (coordination) and hospitals and instead opted to launch health care coalitions, which often have no operational role in disaster response. **NACCD.**

10. Re-examine the role of health care coalitions and whether the funding is sufficient to for operational roles and recruitment of first responder participation. ASPR has embarked on a new operational mission; perhaps there is merit to reconfiguring the roles of the health care coalitions and others at this time as well. **NACCD and ASPR.**

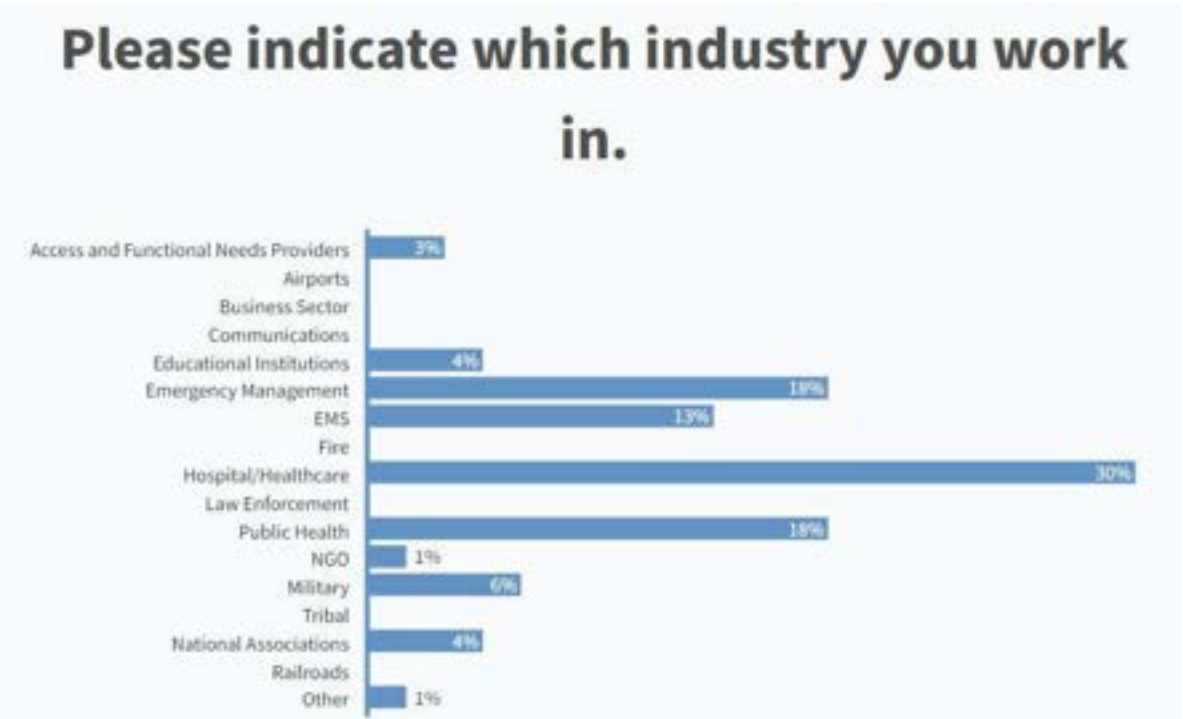
11. Amplify and distribute the WRAP-EM "Anticipate, Plan, and Deter" project (building responder resilience). **WRAP-EM.**

12. Publish with fire, EMS, and others the best practices on mental health and other types of support for hospital workers, first responders, and their families. **NACCD.**

13. Evolve a standardized web-based health information exchange project for use with diverse hospitals to use during disasters. As patient tracking platforms across the country have demonstrated, challenges arise when the federal government permits unique systems to develop that won't "talk" to each other. There is an opportunity to shift the vision. **NACCD.**

Evaluation: The Day 1 evaluation results are displayed on pages 26 and 27. The Day 2 evaluation results are depicted on pages 28 through 35.

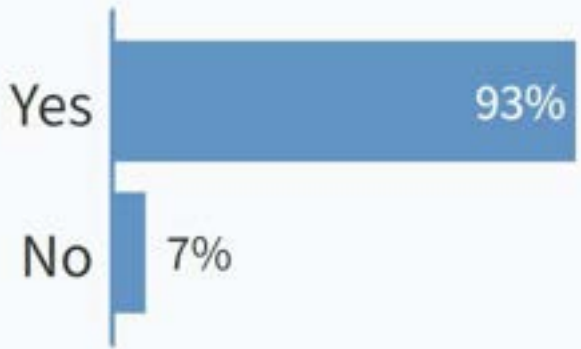
Day 1 Composition of Evaluation Respondents (251 Respondents)



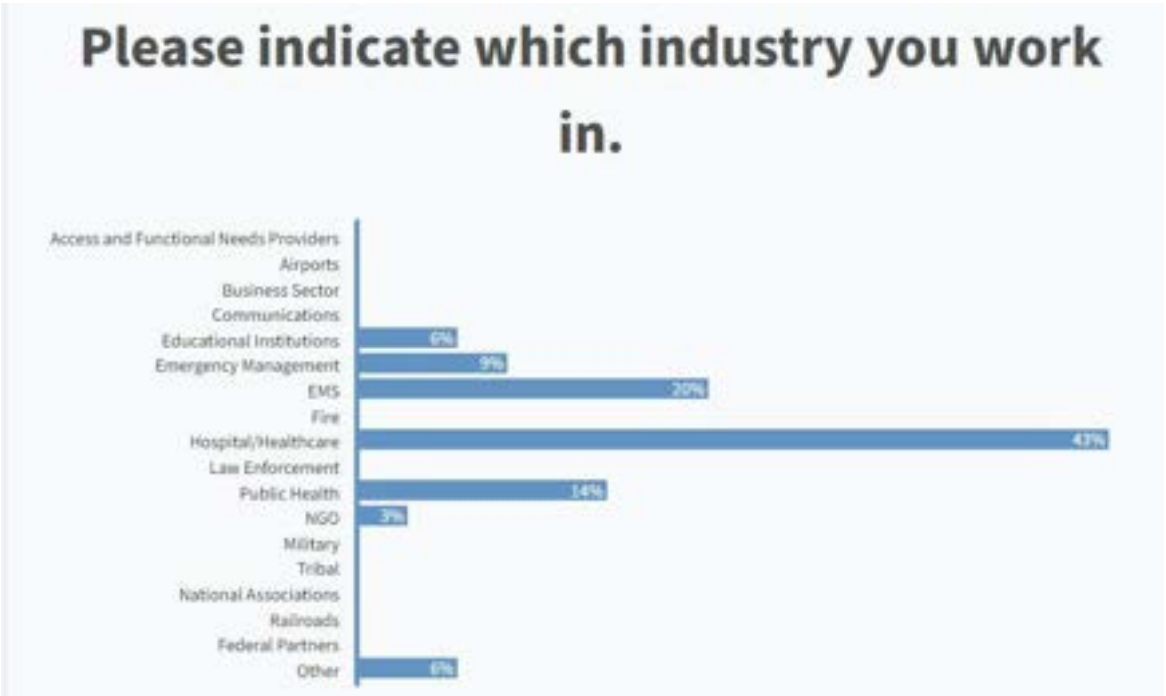
Do you have a better understanding of: California's local and state command structure(s), situational awareness, resources, limitations, and resource distribution during a catastrophic incident?

Cal OES
GOVERNOR'S OFFICE OF EMERGENCY SERVICES

Do you have a better understanding of: First responder, military, and private sector staging, triage, and ground and air transport during a catastrophic incident?

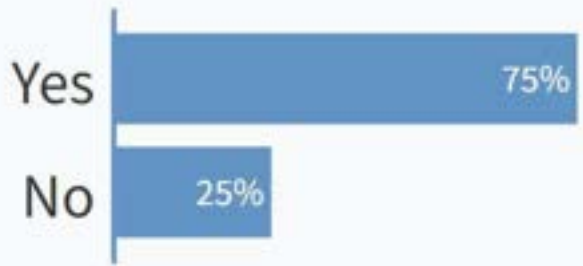


Day 2 Composition of Evaluation Respondents (250 Respondents)



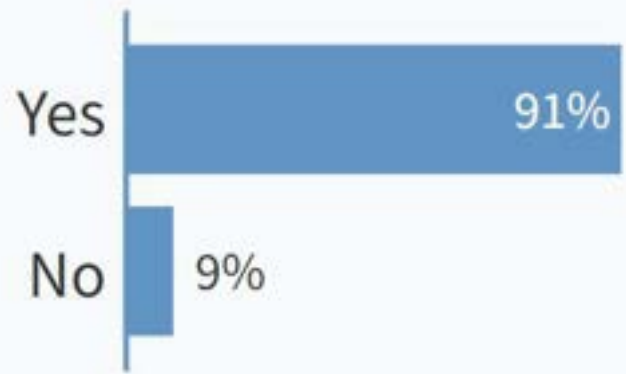
Do you have a better understanding of: Legal complexities of hospital interstate evacuations during a catastrophic incident?

Do you have a better understanding of: Mental health complexities pertaining to the interstate evacuation, transport, and reception of pediatric patients during a catastrophic incident?

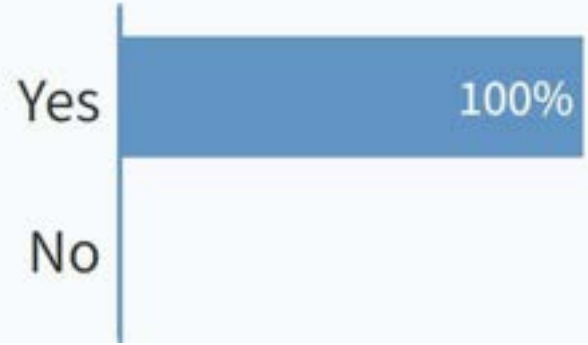


Do you have a better understanding of: Healthcare capacity status identification, hospital needs assessments, communication strategies, and essential elements of information collection during a catastrophic incident?

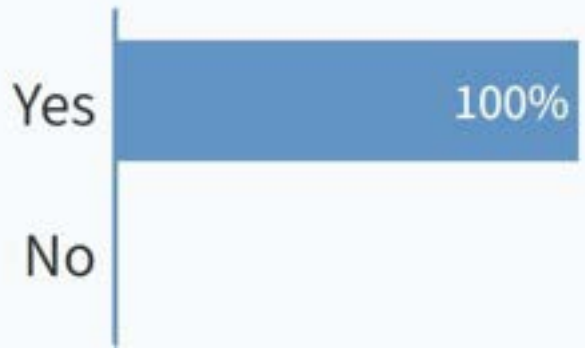
Do you have a better understanding of: Transfer of patient information amongst healthcare systems during a catastrophic incident?



Do you have a better understanding of: Patient tracking in healthcare systems and agencies supporting family reunification during a catastrophic incident?



Do you have a better understanding of: Hospital pediatric patient reception best practices and challenges during a catastrophic incident?



Appendix A

National Pediatric Disaster Conference Oversight Committee

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Mark Young, Regional Administrator, Administration for Strategic Preparedness and Response (ASPR for AZ, CA, HI, NV, AM. Samoa, Guam, CNMI, RMI, FSM, Palau).

Appendix B

Glossary of Acronyms

(Some Common Acronyms are not Included)

AzCHER – Arizona Coalition for Healthcare Emergency Response

ADEM – Arizona Department of Emergency Management

ADHS – Arizona Department of Health Services

AMR – American Medical Response

ASPR – Administration for Strategic Preparedness and Response

CAL-MAT – California Medical Assistance Team

EMAC – Emergency Management Assistance Compact

ESFs – Emergency Support Functions

EMSA -- Emergency Medical Services Authority (California)

EMSC – Emergency Medical System for Children

ESAR-HVP – Emergency System for Advance Registration of Volunteer Health Professionals

MHCC – Medical Health Command Center (California)

PULSE – Patient Unified Lookup System for Emergencies

NACCD – National Advisory Committee on Children and Disasters

NDMS – National Disaster Medical System

NGO – Nongovernmental Organization

NPDC – National Pediatric Disaster Coalition

PICs – Photo Identification Coordinators (pertains to victim tracking)

PPN – Pediatric Pandemic Network

SEOC – State Emergency Operations Center (Arizona)

SERFs – Significant Event Readiness Event Forums

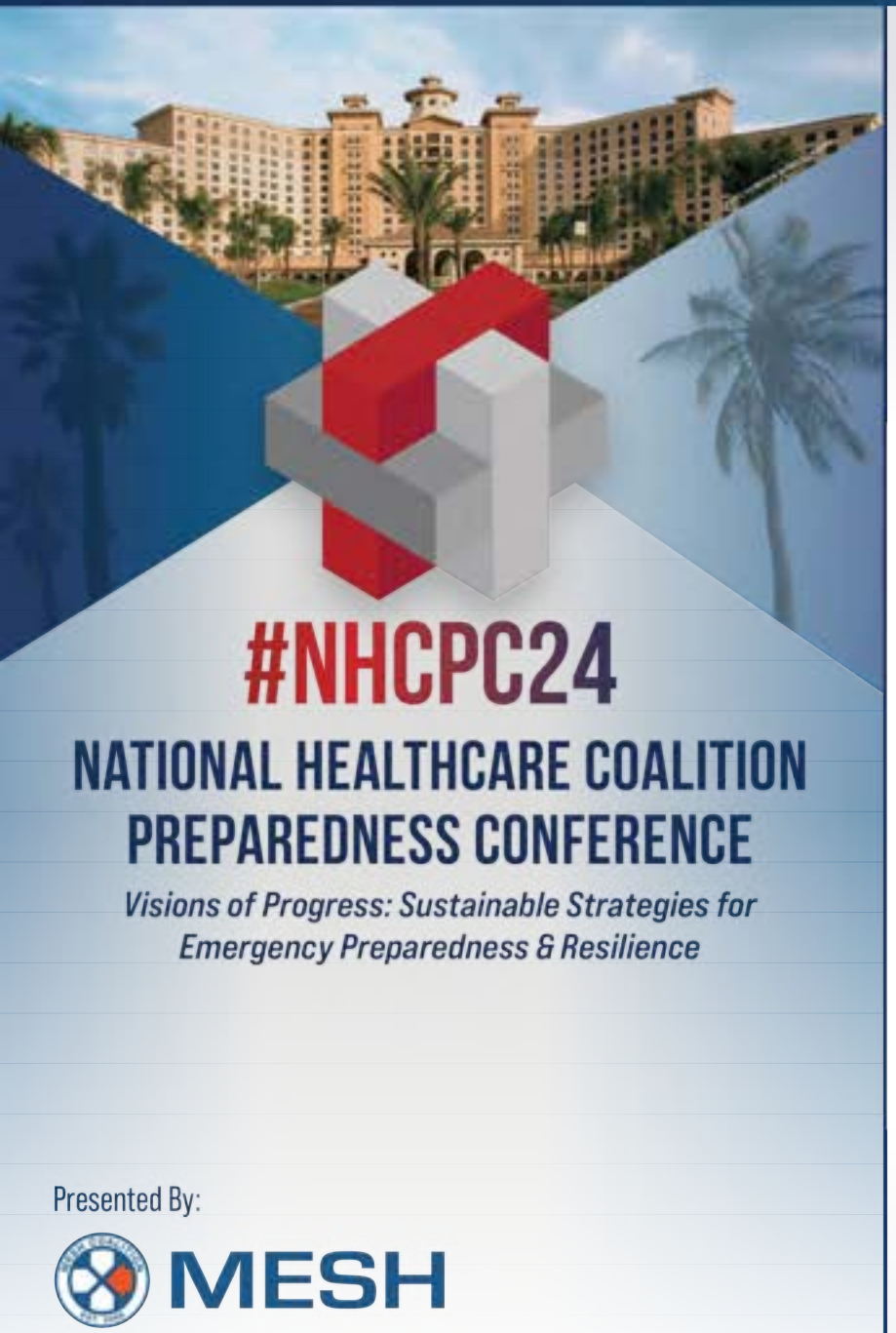
SNS – Strategic National Stockpile

SOC – State Operations Center (California)

USARNORTH – United States Army Northern Command

USNORTHCOM – United States Northern Command

WRAP-EM – Western Regional Alliance for Pediatric Emergency Management



Emergency Medical Services for Children and Healthcare Coalitions – A Partnership for the Children

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Wyoming EMSC Program Manager

Natasha Kurth
Tennessee EMSC Program Manager

Disclosures

- We have no actual or potential conflict of interest about this presentation.
- We have no financial relationships related to this presentation.
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Objectives

- At the end of this presentation, the attendee will be able to:
  - Describe the benefits of involving the EMSC Program within their healthcare coalition.
  - List ways a healthcare coalition can support the EMSC Program in accomplishing its performance measures.
  - Document the national initiatives within the EMSC Program.

What is EMSC?

- History
  - The Emergency Medical Services for Children (EMSC) Program is a US federal government health initiative that aims to reduce child and youth disability and death due to severe illness or injury. This is being accomplished through ongoing efforts to increase awareness among health professionals, providers, planners, and the general public of the unique physiological and psychological needs of children receiving emergency medical care. The EMSC Program funds and supports improvements in pediatric emergency care in each state and territory through competitive grants and cooperative agreements.
- Mission
  - To reduce child and youth mortality and morbidity resulting from severe illness or trauma.

National EMSC Focus Areas

- Hospital Pediatric Readiness Recognition Program
- EMS Pediatric Readiness Recognition Program
  - https://emscimprovement.center/domains/pediatric-readiness/
- Pediatric Emergency Care Coordinators (PECC)
- Mental Health
- Disaster Preparedness
- Safe Transport of Children

Why partner with EMSC?

- Benefits of involving the EMSC Program within their healthcare coalition include:
  - Engage pediatric experts when developing training, exercises, plans, education, etc.
  - Resource sharing
  - Project funding
  - Mitigate the duplication of projects
  - Facilitate specific stakeholder groups

Possible Partnerships…

- Serve as a pediatric representative on the HCC executive board
- Provide templates for ASPR annexes
- Volunteer at HCC events and trainings
- Serve on the HPP advisory committee
- Pediatric Annex may be used as the foundation for Hospital and EMS pediatric recognition programs
- HCC may provide regional PECCs for the EMSC Program grant performance measures

Funding Ideas

- EMSC-funded HCC projects
  - Education – utilized HCC members to provide education
  - Sensory Kits
  - Pediatric restraint devices
- HCC-funded EMSC projects
  - Pediatric safety transport devices
  - Training and Exercises

Ways an HCC can support the EMSC Program in accomplishing its performance measures

- Disaster Plans for hospitals and EMS agencies
  - Pediatric Annex
  - Transportation plan
  - Surge Plan
- Pediatric Emergency Care Coordinators (PECC)
- Provide education to hospitals and EMS agencies
- Storage of equipment and supplies
- Share education equipment (i.e. Pediatric Prep in Seconds Toolkits)
- Serve on the EMSC Program advisory committee
- Share distribution lists and contacts

How to find your EMSC Program Manager

- Find your state program
- Where is EMSC located?
  - State EMS Offices
  - Public Health Emergency Preparedness and Response Programs
  - University Systems
  - Children's Hospitals
  - Bureau of Family Health
  - Trauma Programs
  - Injury Prevention Programs

Questions?