The Importance of Pediatric Emergency Care Readiness and Preparation: Every Child, Every Day, Every County

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Florida EMS for Children Project and Medical Director

FL EMSC = FL PEDReady

HRSA Maternal & Child Health

EMERGENCY MEDICAL SERVICES FOR CHILDREN
FLORIDA PEDREADY

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

Introduction

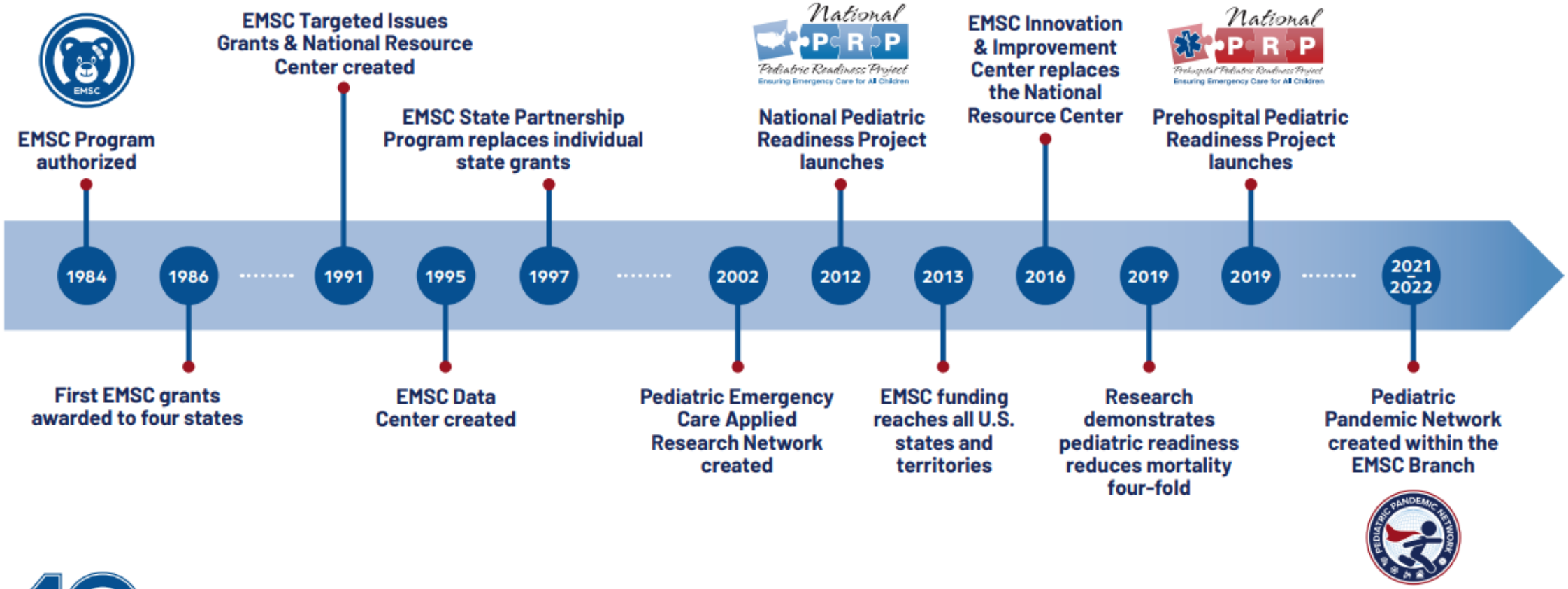
- No financial disclosures
- History behind the presentation
- Providing emergency medical services for children is a social obligation – and one too-infrequently recognized. This presentation will give an overview of the work of the federally funded Florida Emergency Medical Services for Children State Partnership Program; describe National and Florida EMSC initiatives and the Pediatric Pandemic Network; address how they relate to health care coalitions, disaster planning, and pediatric readiness; review pediatric considerations and resources; and discuss partnerships and collaboration.

Who Is This Guy And What Did He Do For Children?

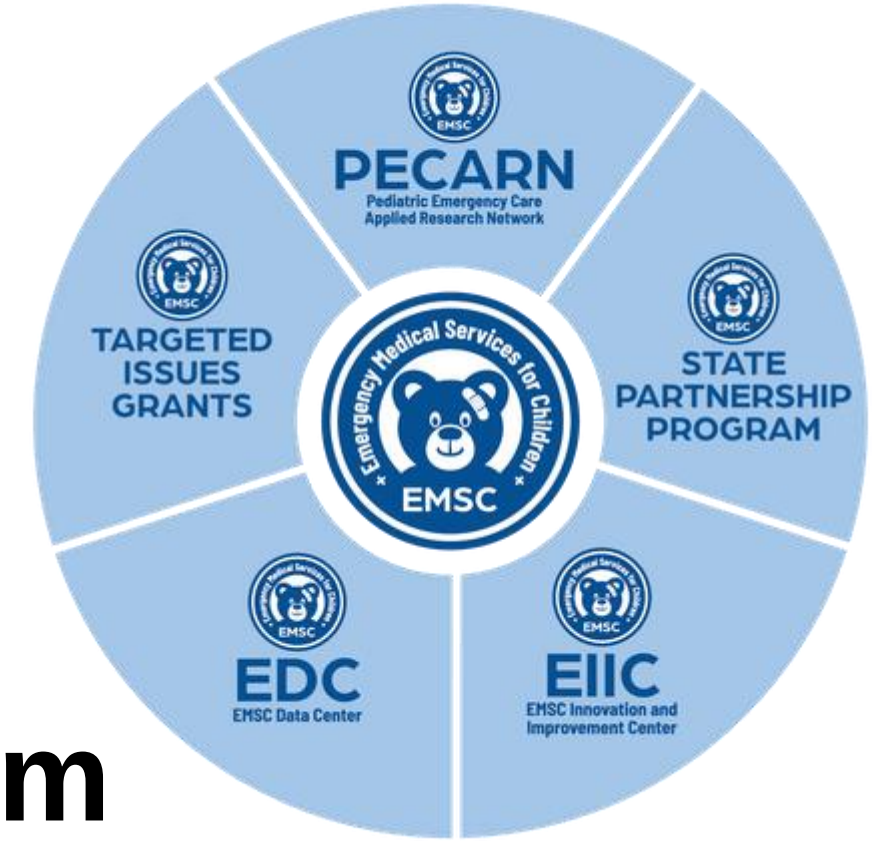
- U.S. Senator Daniel K. Inouye introduced legislation to establish, implement and fund a national initiative designed to address emergency medical services for children systems development
- In 1984, Congress enacted legislation (Public Law 98-555) authorizing the use of federal funds for EMSC. By this law, and through the administration of the MCHB, the EMSC program obtained funds to improve the pediatric capabilities of existing emergency medical services systems.

- Why?
  - His staff assistant and chief of staff Patrick DeLeon's daughter was hospitalized with meningitis. The girl's treatment demonstrated the shortcomings of an average emergency department when treating a critically ill child.

- Mission: to reduce childhood morbidity and mortality due to severe illness or trauma
- Administered by the Health Resources and Services Administration (HRSA), within the Department of Health and Human Services
- Does not promote development of a separate EMS system for children. The focus is on enhancing the pediatric capability of existing EMS systems! …..and disaster systems of care.

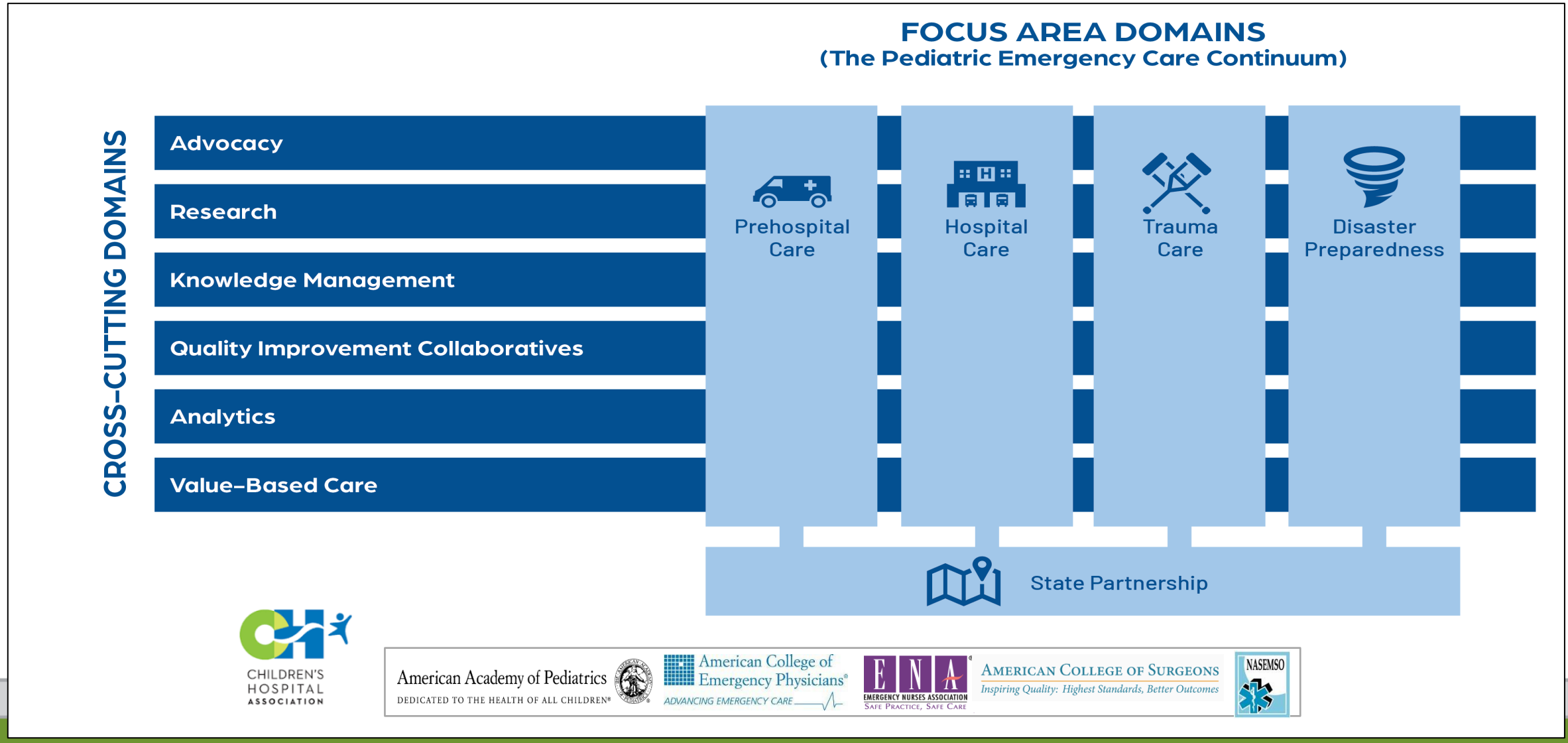


EMSC
Emergency Medical Services for Children



National EMSC Program

EMSC Innovation and Improvement Center (EIIC)



CHILDREN'S HOSPITAL ASSOCIATION

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

American College of Emergency Physicians®
ADVANCING EMERGENCY CARE

ENA
EMERGENCY NURSES ASSOCIATION
SAFE PRACTICE, SAFE CARE

AMERICAN COLLEGE OF SURGEONS
Inspiring Quality: Highest Standards, Better Outcomes

NASEMSO

EMSC State Partnership Program Performance Measures

- Emergency Departments
  - 1) Expand the uptake of pediatric readiness in EDs by establishing a voluntary state hospital ED pediatric readiness recognition program, 2) designating pediatric emergency care coordinators/champions (PECCs), 3) ensuring hospital EDs weigh and record children in kilograms, and 4) ensuring that disaster plans address the needs of children
- Emergency Medical Services
  - 1) Improve pediatric readiness in EMS systems by establishing a voluntary state prehospital pediatric readiness recognition program, 2) designating PECCs, 3) increasing the number of agencies that have a process for pediatric skills-check on the use of pediatric equipment, and 4) ensuring that disaster plans address the needs of children
- Family Representation and Advocacy
  - 1) Prioritize and advance family partnership and leadership in efforts to improve EMSC systems of care

Florida EMSC Mission

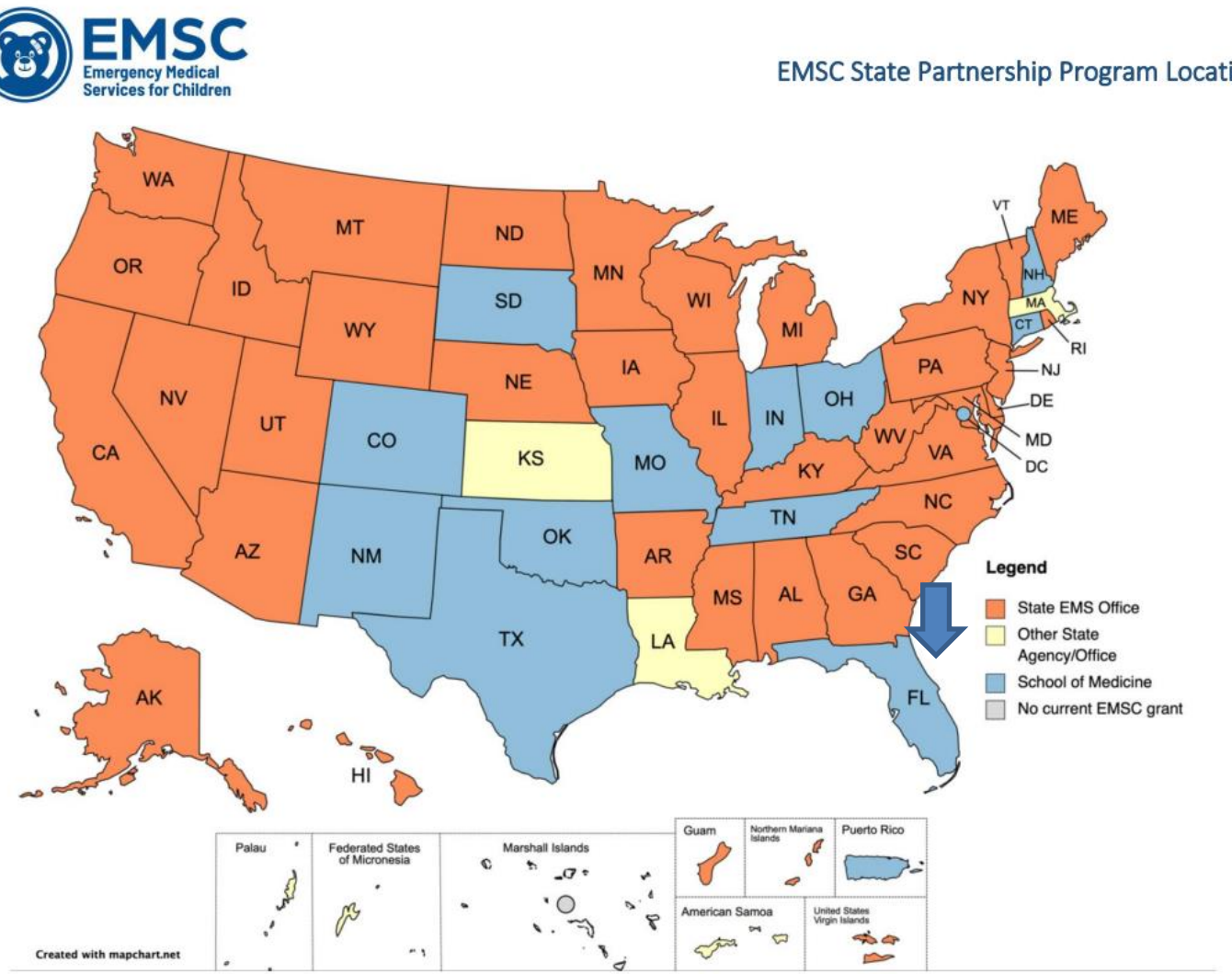
Partnering with Florida EDs, EMS agencies, disaster preparedness organizations, and families in the care of ill and injured children to enhance pediatric readiness across the continuum of care

Florida EMSC Background

- Florida is the 3rd most populous state in the US; however, all states receive same amount of HRSA funding as other states
  - Florida has 320 EMS agencies and 335 emergency departments
  - Free standing emergency departments are rapidly multiplying
- Florida was one of early states to focus on EMSC (Luten & Tepas) in the 1990s
  - In 1997, Florida was awarded a HRSA partnership grant and legislation passed to establish the Florida EMSC Advisory Committee
- Effective April 2023, Florida EMSC is administratively housed at University of Florida College of Medicine-Jacksonville Department of Emergency Medicine Division of Emergency Medicine Research in collaboration with the Florida Department of Health Bureau Emergency Medical Oversight

EMS for Children State Partnerships

State Partnership grants were first introduced in 1996 to help states improve, refine, and integrate pediatric care within the state EMS system.

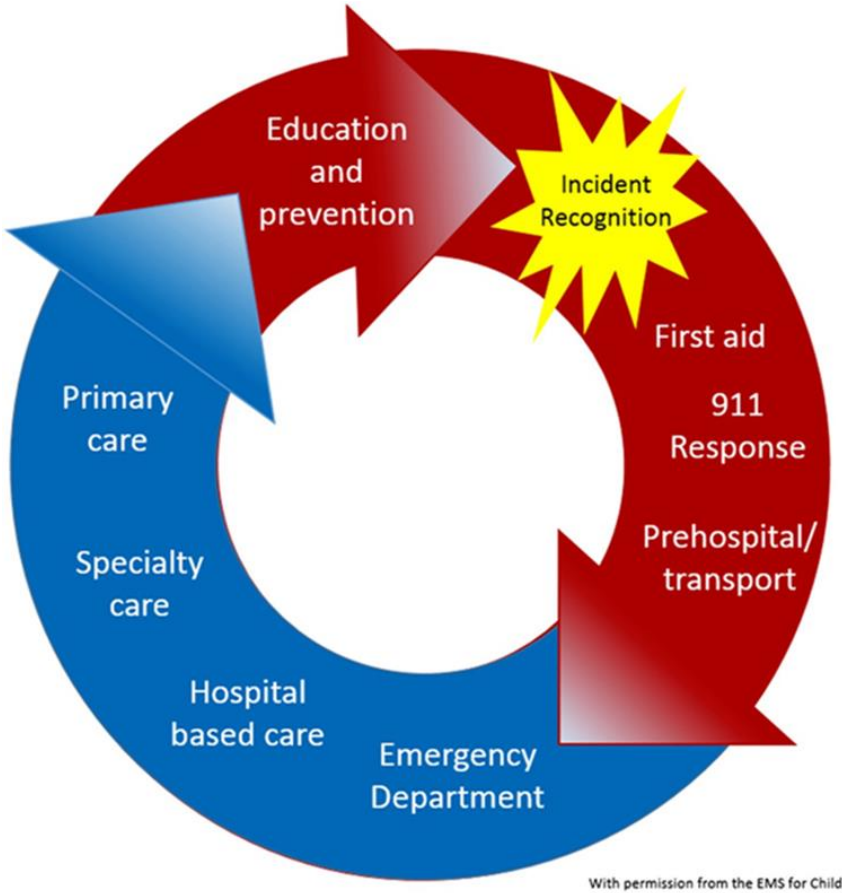


Updated May 8, 2023

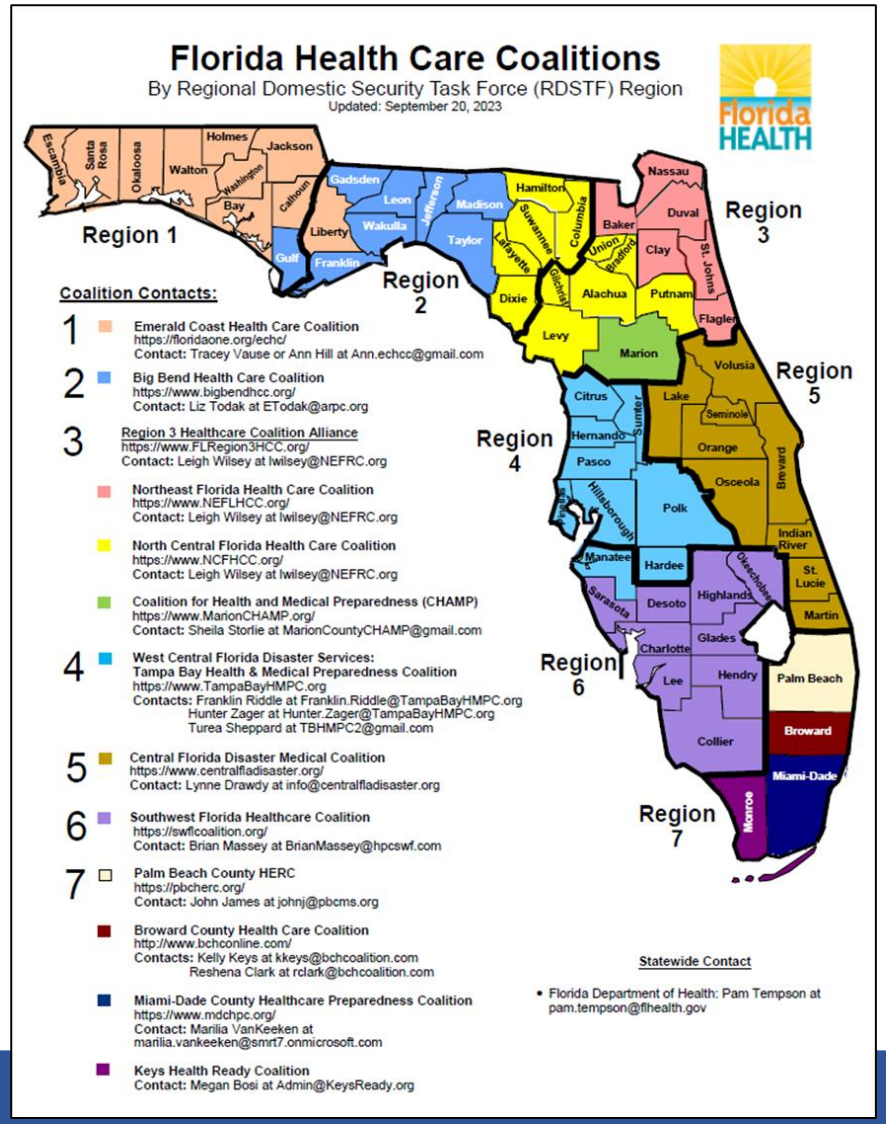
EIIC

PECC Workforce PWDC Development Collaborative

Goal is to Ensure the Continuum of Care is Pediatric Ready



With permission from the EMS for Children Innovation and Improvement Center. Adapt



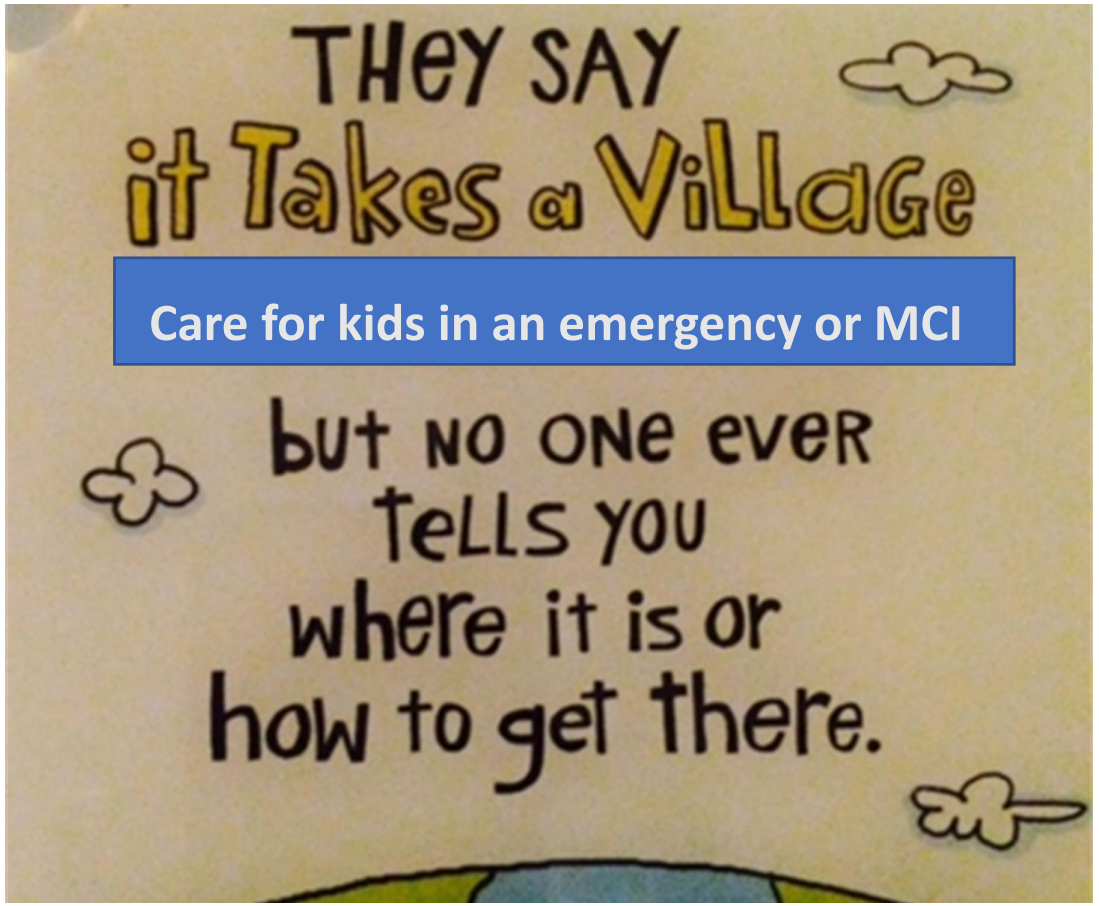
Why Should You and/or Your Family, University, Institution, City Care about Kids, EMSC, and Pediatric Readiness?

- … I don’t take care of kids
- … That’s why we have children’s hospitals
- … I don’t have children
- … Children are rarely sick
- … My job isn’t pediatric focused
- … This topic isn’t relative to me

What is one of the most stressful, emotional situations for emergency physicians, nurses, paramedics, teachers, bystanders?

- Caring for a critically ill child
- Watching a child die
- Delivering bad news to a family
- Calling 911 about a child…..drowning at a park, run over by a car, in a bus that goes off a bridge (filled with parents and children), active shooter in school, car at bank drive through highjacked and unknown child in car accidently hit by law enforcement bullets
- You supervise someone who made a medication or other mistake in caring for a child
- You are married to someone in one of these scenarios
- PTSD, depression, sleep disturbances, suicide

Why Should You and/or Your Health Care Coalition Care about Kids…EMSC…and Pediatric Readiness?



- Could be your child, grandchild, neighbor, “village”, job
- Emotional burden
- Low volume, high risk situations
- Hurricane Ian example
- Examples of recent MCIs, disasters
  - Where do kids go?

Relationship between EMSC, Pediatric Readiness, and Disaster Preparedness

Can you take care of 4 critically injured kids today? Pediatric Readiness = Preparedness

If we can’t be ready every day, then we can’t be ready on game day!

Case #1 Scenario

- A 33-year-old mother is driving her 9 and 11 yo daughters home from a horse-riding competition, pulling a loaded horse trailer, at night, in a rural area.
- Weather conditions- foggy and wet
- Another motorist finds truck and trailer overturned on the side of a 2-lane road; 911 is called
- Mother is found unconscious inside truck
- Both children and 2 horses are critically injured, one in cardiac arrest

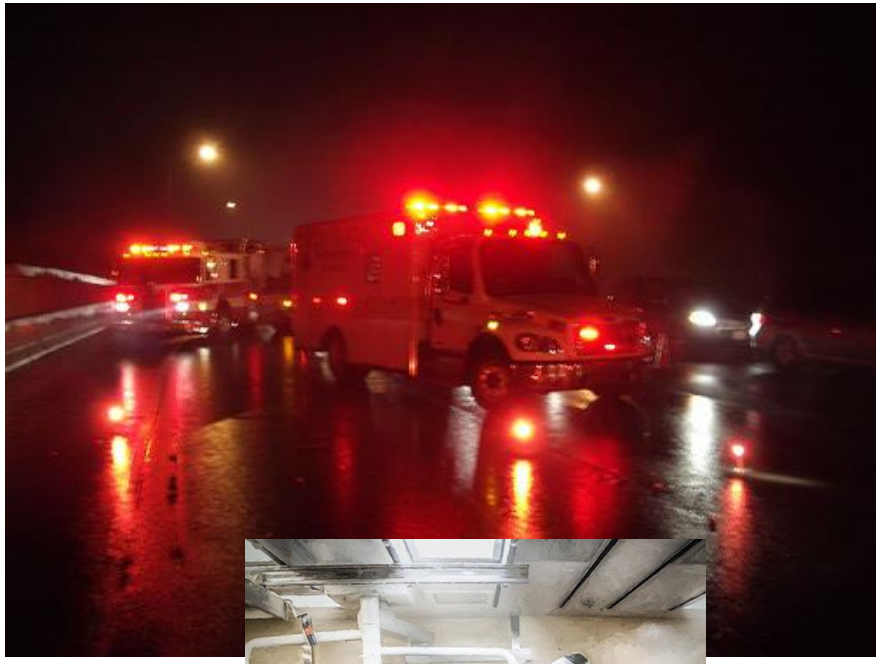
Florida ranks 3rd in the US for horse population (387,100 horses)

Case #1 Scenario (Rural)

- Local EMS busy on a stroke alert and there is only 1 active ALS unit for the entire county. EMS arrives on scene after 20… minutes. Paramedic on hour 20 of a 24-hour shift. All patients in this scenario need services of a trauma center.
- Closest designated (state) or verified (ACS) trauma center for children is >1 hour away
- Foggy and rainy so no air transport available
- After performing bag valve mask ventilation, paramedic on scene attempts to intubate one child but is unsuccessful. He recalls that his recent request for pediatric SGA devices was denied due to funding. Rural EMS agencies often have limited funding for pediatric equipment that is rarely used.
- Entire family (3 patients) transported to closest community ED staffed with one locum tenens physician and 2 nurses.
  - Effect of pandemic and burn out on ED and EMS staffing
- Children will require transport to a state designated pediatric trauma center but who will transport them and how long will it take? In some areas it might be that same EMS crew-taking them out of service for hours…or a 2 hour wait for interfacility ground transport.

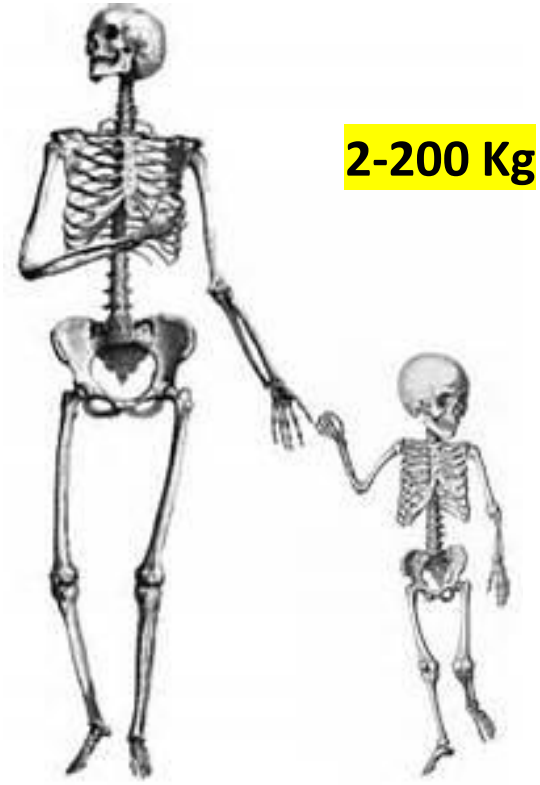
Case #2 Urban Scenario

- Car accident occurs at 10 pm on a weekend in an urban area 5-10 minutes away from a Level I trauma center (pediatric and adult). A family of 6 was injured in a rollover collision involving a van.
- EMS radio report “4 children in back of the van, 2 reds (cardiac arrest), 2 critical”.
  - *What key information do you need from EMS?*
  - *How do you prepare for multiple patients of different ages?*
  - *Where do you find multiple sets of pediatric and adult equipment?*
  - *How do you rapidly determine pediatric drug dosages?*
  - *How do you register a child when you don’t know the name or age?*

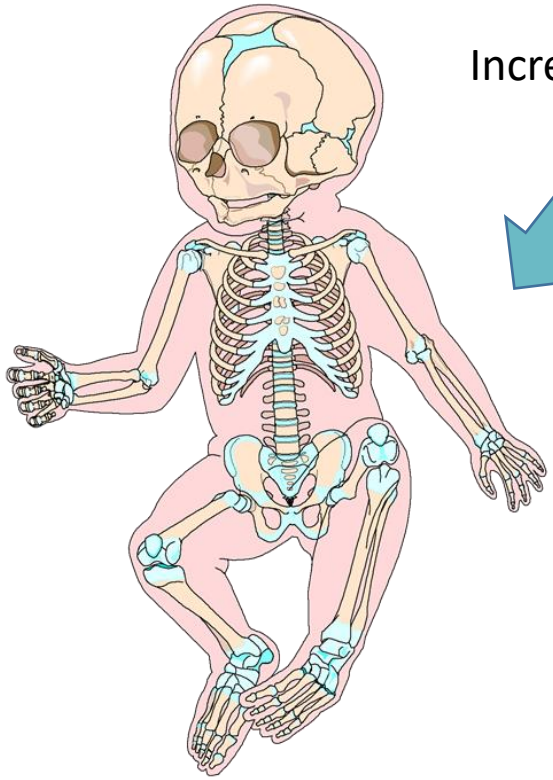


Children vs. Adults

Key Anatomical and Physiological Differences



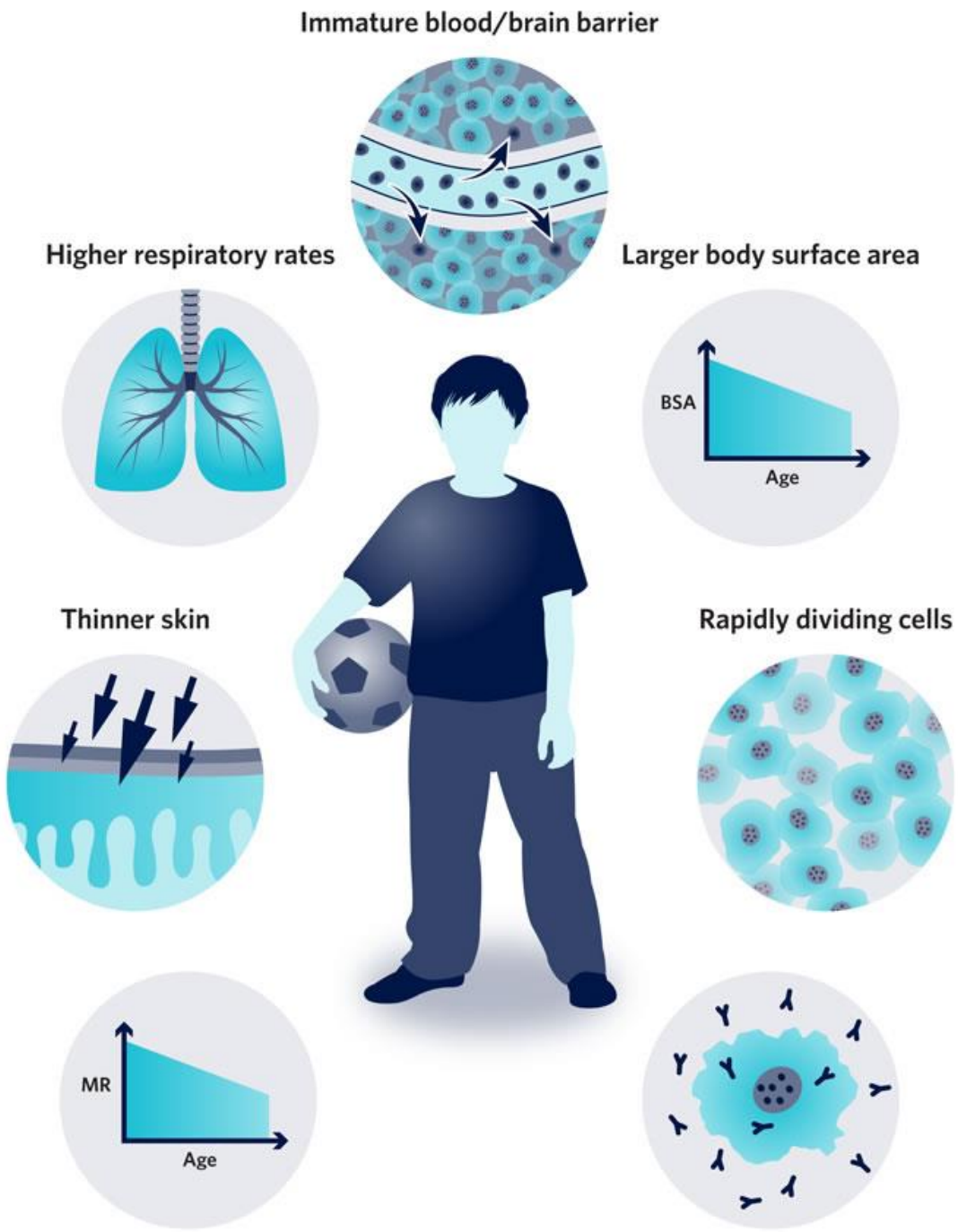
2-200 Kg

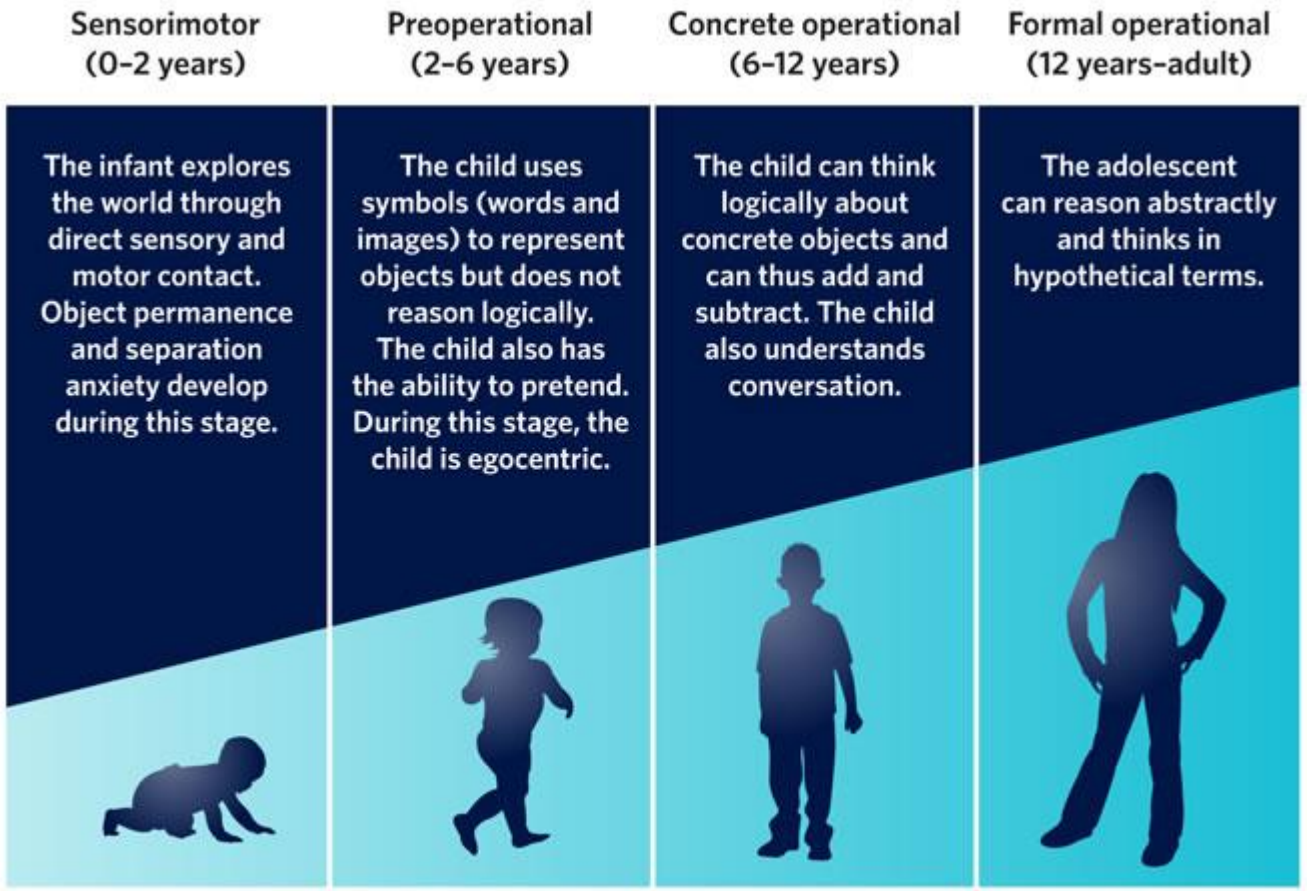


Increased cartilage

Differences in anatomical, physiologic, and injury mechanisms drive differences in injury pattern, burn, chemical and radiation response, management and outcomes.

Age and developmental stage affect injury patterns and many other things….


Immature blood/brain barrier
Higher respiratory rates
Larger body surface area
BSA
Age
Thinner skin
Rapidly dividing cells
MR
Age
Higher metabolic rate
Immature immune system

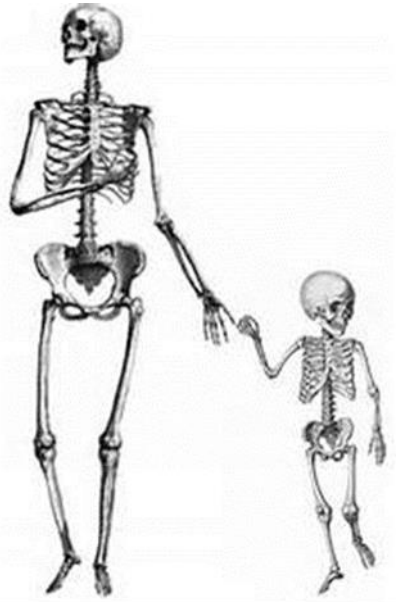

Sensorimotor (0–2 years)
The infant explores the world through direct sensory and motor contact. Object permanence and separation anxiety develop during this stage.
Preoperational (2–6 years)
The child uses symbols (words and images) to represent objects but does not reason logically. The child also has the ability to pretend. During this stage, the child is egocentric.
Concrete operational (6–12 years)
The child can think logically about concrete objects and can thus add and subtract. The child also understands conversation.
Formal operational (12 years–adult)
The adolescent can reason abstractly and thinks in hypothetical terms.

General Challenges in Pediatric vs Adult Care

- Wide range of ages and weights
  - Premature infant to adolescent (2-200 Kg)
  - Equipment and medication challenges
- Children are poor historians or nonverbal
- Difficult vascular access due to size
- Children come in a family package…or with no family
  - Taking care of child and family
  - Minimum of 2 patients (child and parent/caregiver)
  - Possibility of injured parents and siblings
  - Never assume, always ask relationship of adult to the child
    - I am, you are, and this is???
    - Foster care, incarceration, human trafficking…….

Pediatric ED and EMS Epidemiology

- Only 7-8% of pediatric related ED patients arrive via EMS compared to ~25% for adult ED patients
- Pediatric patients (0-18 years) comprise only 6-10% of EMS transports
  - Peak age groups are usually 14-18 years and <1 year of age
- EMS and ED professionals perform:
  - Infrequent pediatric critical procedures (<1% of all pediatric encounters), even in children's hospitals



2-200 Kg

Pediatric EMS Epidemiology (National)

EMS

- 80% of all US agencies see < 8 children/month
- EMS providers perform:
  - Infrequent pediatric critical procedures **(<1% of all pediatric encounters)**
  - Infrequent medication dosing **(20% of all pediatric encounters)**

Pediatric emergency and prehospital care is different than adult care

LOW VOLUME
HIGH RISK
HIGH EMOTIONAL BURDEN
FAMILY PACKAGE

Pediatric ED Epidemiology and Trends

- **34 million ED visits by children every year**
- **1 in 5 children go to an ED each year**
- **Nationally, 27% of all ED visits are pediatric related**
  - < 1% true resuscitations; adult resuscitations much more common
  - Significant % of critically ill and injured children arrive by private car or walk in. Why?
  - Disaster MCI examples
  - Watch your waiting rooms!
- **Majority of US children and adolescents access emergency care in *nonpediatric* facilities**
  - (~75-85%, varies by city and state)
  - **70% are cared for in EDs that see ≤ 15 pediatric patients per day! ↓10/day**
  - Who has the loudest voice in policy making for pediatric emergency care?

*The spectrum and frequency of critical procedures performed in a pediatric ED: implications of a provider-level view. * Mittiga MR, Geis GL, Kerrey BT, Rinderknecht AS. Ann Emerg Med. 2013 Mar;61(3):263-70.*

- 90,000 annual visit Children's Hospital ED
- Primary outcome measure was frequency of critical procedures during 12 consecutive months.
- RESULTS: **261 critical procedures performed during 194 patient resuscitations, which represented 0.22% of all ED patient evaluations.**
- **61% of PEM faculty did not perform a single critical procedure.**
- Orotracheal intubation occurred 147 times and represented 56% of all critical procedures, yet 63% of pediatric emergency medicine faculty did not perform a single successful orotracheal intubation. Pediatric emergency medicine fellows performed a median of 3 critical procedures.
- CONCLUSION: **Critical procedures were rarely performed in a large, academic pediatric ED.** Pediatric emergency medicine faculty are at significant risk for skill deterioration, and pediatric emergency medicine fellows are unlikely to achieve competence in the performance of critical procedures if clinical exposure is the sole basis for the attainment and maintenance of skill.

*This study was done prior to the popular use of high flow nasal cannula and newer airway adjuncts.

Cabalatungan SN, Thode HC Jr, Singer AJ. Emergency medicine physicians infrequently perform pediatric critical procedures: a national perspective.Clin Exp Emerg Med 2020;7(1):52-60.

Objective: To our knowledge, this is the first comprehensive study using a nationally representative database to estimate the frequency of critical procedures (endotracheal tube intubation [ETI], cardiopulmonary resuscitation [CPR], and central line insertion [CLI]) in children and adults. Methods: The study was based on the secondary analysis of the 2010-2014 National Hospital Ambulatory Medical Care Survey. We included adult and pediatric patients undergoing critical procedures in the emergency department. We extracted demographic and clinical information, including the performance of critical procedures. For frequent procedures (≥1 per year), we estimated the annual number of critical procedures per emergency physician (EP) by dividing the total number of annual critical procedures by the total number of EPs (estimated at 40,000). For infrequent procedures, we calculated the average interval between procedures. We summarized the data with descriptive statistics and 95% confidence intervals (CIs). Results: There were an estimated 668 million total emergency department visits (24% pediatric). On average, a single EP performed 8.6 (95% CI, 5.5 to 11.7) CLIs, 3.7 (95% CI, 2.4 to 5.0) CPRs, and 6.3 (95% CI, 5.3 to 7.4) ETIs per year in adults. In comparison, a single EP performed one pediatric CLI, CPR, and ETI every 3.2 (95% CI, 1.9 to 9.8), 5.2 (95% CI, 2.8 to 33.5), and 2.8 (95% CI, 1.6 to 8.9) years, respectively. Conclusion: Our nationwide findings confirm those of previous smaller studies that critical procedures are significantly fewer in children than adults. We suggest that methods to retain skills in pediatric critical procedures should be developed for general EPs to ensure that they deliver

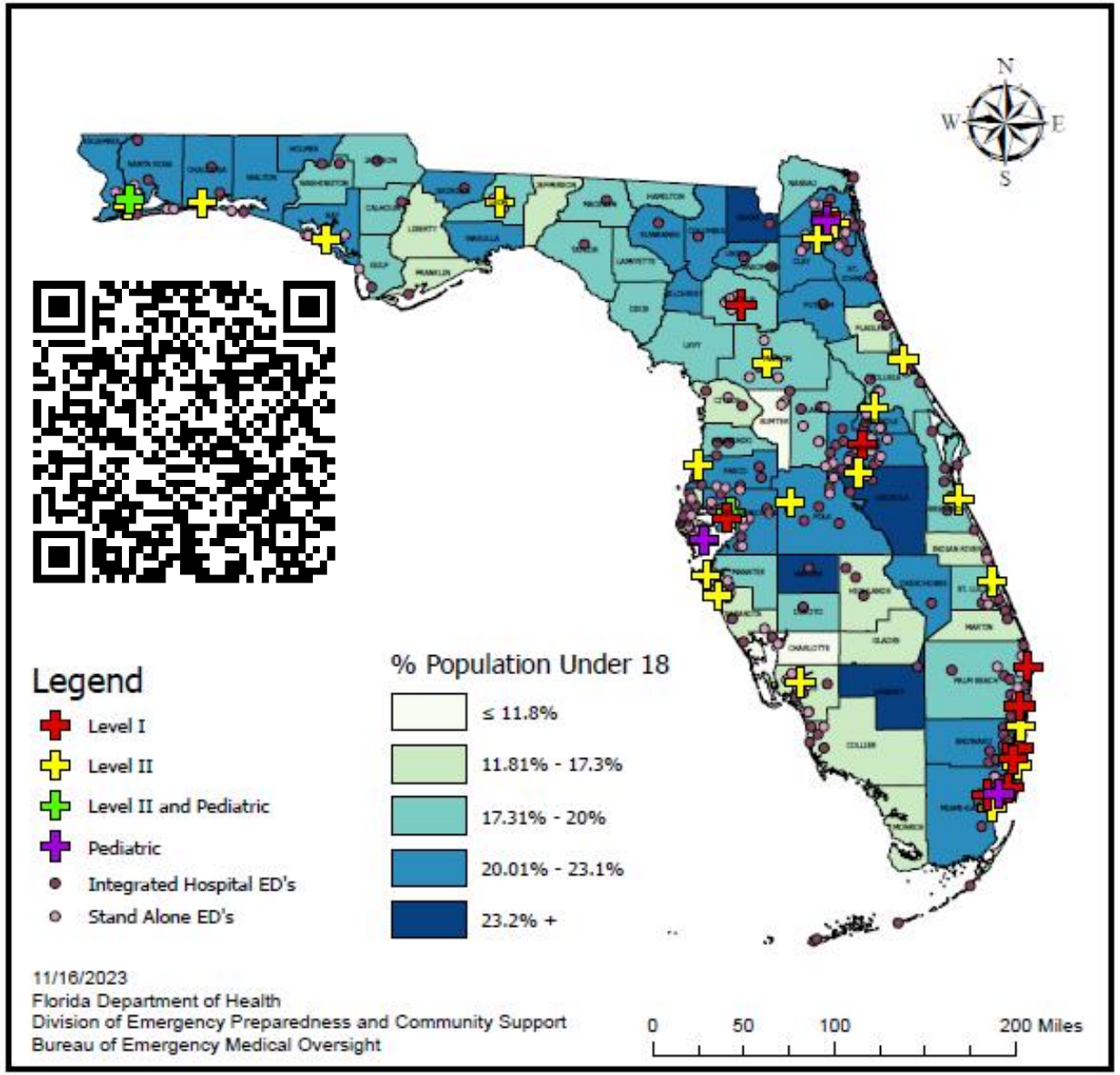
Where Do Parents Take Their Children For An Emergency? (2023 Data)

- > 80% seek care in their local ED (28 million)
  - > 90% are general EDs and < 10% are pediatric specific or designated pediatric area of the ED
- Of the general EDs > 70% see < 10 children per day
  - Why a decrease?
  - What type of EDs are increasing?

Map of FL Trauma Centers and EDs

- 335 EDs: 222 Integrated ED's, 113 Stand Alone EDs
- 322 licensed EMS agencies: ALS, BLS, Air, etc.
- 17 Children's Hospitals

(4 free standing), 15 state designated Trauma Centers serving children (Level I, Pediatric or Level II/Pediatric), 4 Burn Centers with pediatric capability



Florida HEALTH

Percent of Population Under 18 Years of Age In Relation to Trauma Centers and Emergency Departments

Disclaimer: This thematic map is for reference purposes. Any reliance on the information contained herein is at the user's own risk. The Florida Department of Health and its agents assume no responsibility for any use of the information contained herein or any loss resulting there from.

Percent of Population Under 18 Years of Age in Relation to Trauma Centers and EDs

Rural Counties

Florida Rural Counties

Last Update: February 2023

The State of Florida defines rural as:

- A county with a population of 75,000 or less
- A county with a population of 125,000 or less which is contiguous to a county of 75,000 or less
- Any municipality within a county as described above

(Section 288.0656, Florida Statutes)

Capability of Hospitals to Provide Definitive Pediatric Care is Decreasing and Transfers are Increasing: The Perfect Storm! 2008-2016

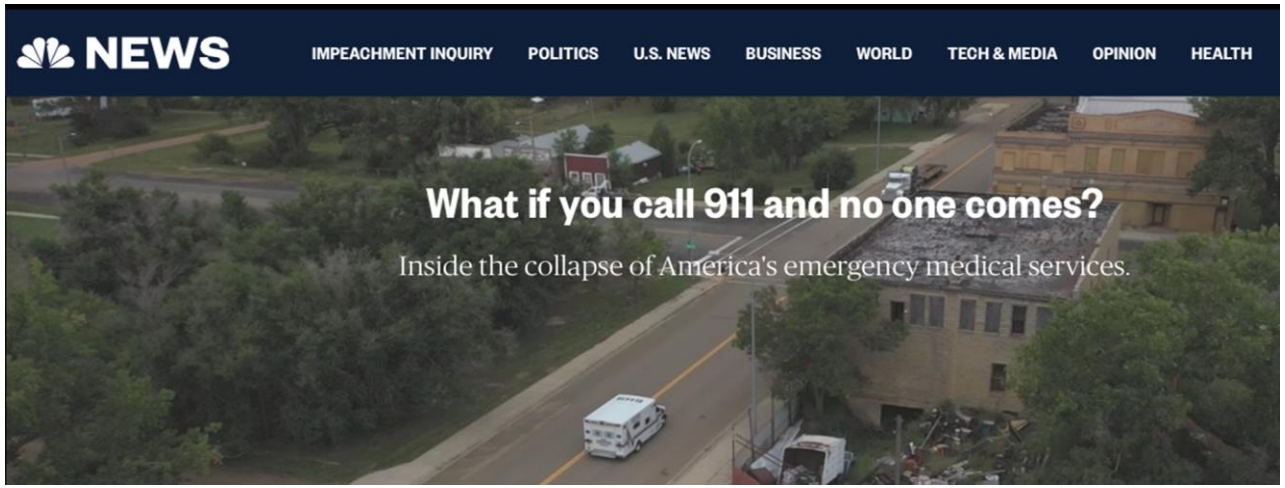
- ED visits among rural children to hospitals in the lowest capability category **increased from 12.6% in 2008 to 39.1% in 2016**.
- **Total pediatric ED transfers increased by 27.7%** with increases in all volume and urbanicity categories, except at primarily pediatric institutions
  - Sharpest increases occurred in low-volume and rural hospitals
  - Study was pre-COVID 19, pre-explosion of FSEDs, and MH pandemic, pre-tripledemic
  - What does this mean for EMS- air and ground?

Over last decade ~ 1000 pediatric inpatient units have closed in the US! Same happening for OB

Michelson KA, Hudgins JD, Lyons TW, et al. Trends in Capability of Hospitals to Provide Definitive Acute Care for Children: 2008 to 2016. Pediatrics. 2020; 145(1): e20192203. Gausche-Hill M. Emergency and Definitive Care for Children in the United States: The Perfect Storm. Pediatrics. 2020; 145(1):e20193372

And it’s going to take a long time to get them transferred to definitive care!


Hospital
Closed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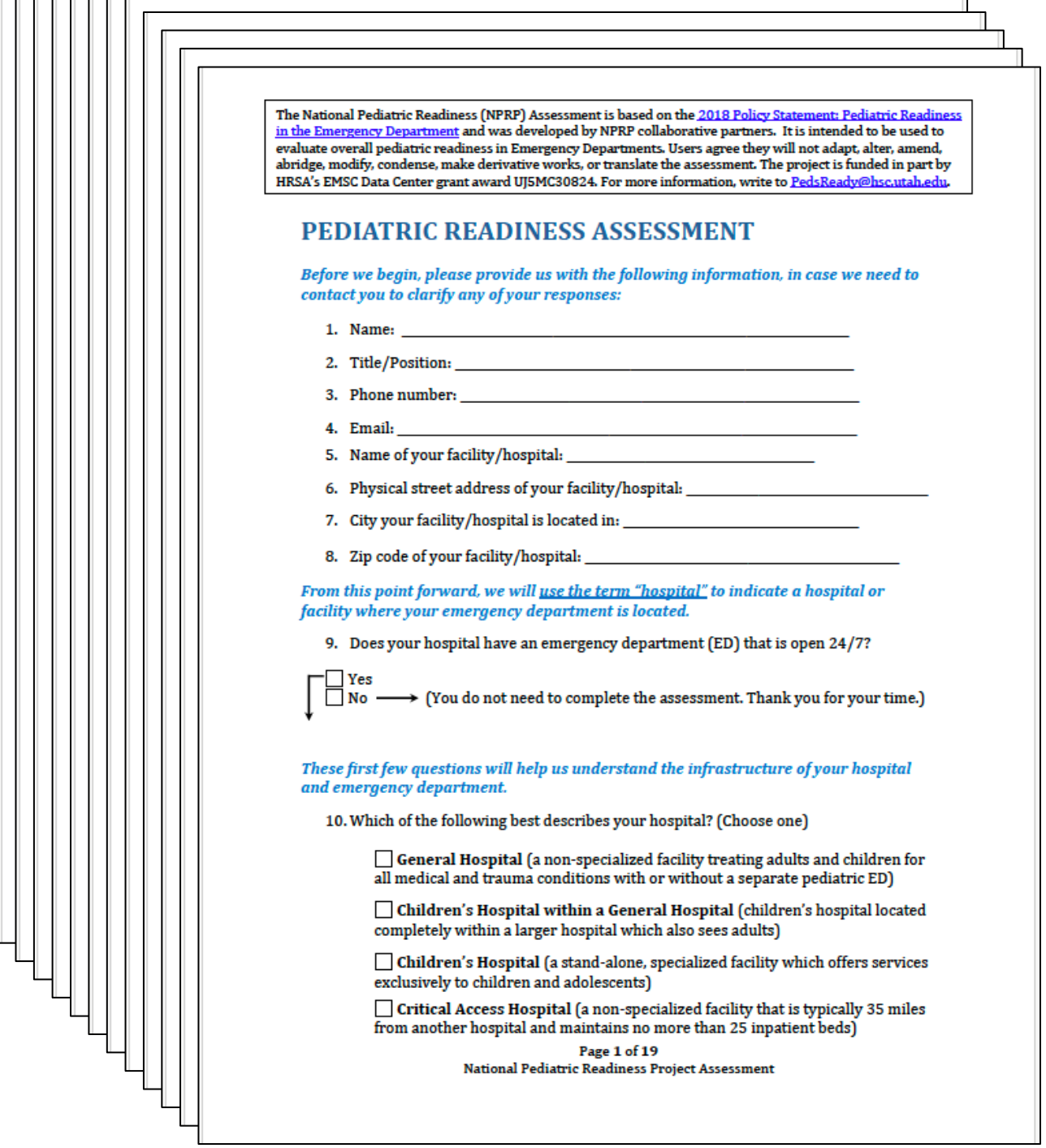
WORLD
TECH & MEDIA
OPINION
HEALTH
What if you call 911 and no one comes?
Inside the collapse of America's emergency medical services.

National EMSC Resources

- EMSC Pulse Newsletter
  - National and state activities, quality improvement initiatives, data findings and research updates, educational resources and events, funding opportunities, and more
- Pediatric Education and Advocacy (PEAK) Kits
  - Best practice educational resources: recommendations, learning modules, podcasts, webinars
  - Current: status epilepticus, suicide, pain, agitation, and child abuse
- Other resources
  - Toolkits, learning modules, and webinars

National Pediatric Readiness Project (NPRP)

For EDs



The National Pediatric Readiness (NPRP) Assessment is based on the 2018 Policy Statement: Pediatric Readiness in the Emergency Department and was developed by NPRP collaborative partners. It is intended to be used to evaluate overall pediatric readiness in Emergency Departments. Users agree they will not adapt, alter, amend, abridge, modify, condense, make derivative works, or translate the assessment. The project is funded in part by HRSA's EMSC Data Center grant award UJ5MC30824. For more information, write to PedsReady@hsc.utah.edu.

PEDIATRIC READINESS ASSESSMENT

Before we begin, please provide us with the following information, in case we need to contact you to clarify any of your responses:

1. Name: _____
2. Title/Position: _____
3. Phone number: _____
4. Email: _____
5. Name of your facility/hospital: _____
6. Physical street address of your facility/hospital: _____
7. City your facility/hospital is located in: _____
8. Zip code of your facility/hospital: _____

From this point forward, we will use the term "hospital" to indicate a hospital or facility where your emergency department is located.

9. Does your hospital have an emergency department (ED) that is open 24/7?

☐ Yes
☐ No → (You do not need to complete the assessment. Thank you for your time.)

These first few questions will help us understand the infrastructure of your hospital and emergency department.

10. Which of the following best describes your hospital? (Choose one)

☐ **General Hospital** (a non-specialized facility treating adults and children for all medical and trauma conditions with or without a separate pediatric ED)

☐ **Children's Hospital within a General Hospital** (children's hospital located completely within a larger hospital which also sees adults)

☐ **Children's Hospital** (a stand-alone, specialized facility which offers services exclusively to children and adolescents)

☐ **Critical Access Hospital** (a non-specialized facility that is typically 35 miles from another hospital and maintains no more than 25 inpatient beds)

NPRP Assessment

- Performed Nationally Every 5+ Years
  - 2013, 2021, …

<u>Option to take it multiple times</u>

- 2021 version 81 Questions
- Download the PDF, review, then complete online
  - Physician and nursing questions
- Immediate GAP Report Summary

NPRP Assessment

- View the NPRP Assessment
- Intended to evaluate overall pediatric readiness in EDs
- Can be taken at anytime for quality improvement purposes
- Additional information about the NPRP
- Next NPRP Assessment expected in 2026

ACS VRC Verification Review Consultation
American College of Surgeons

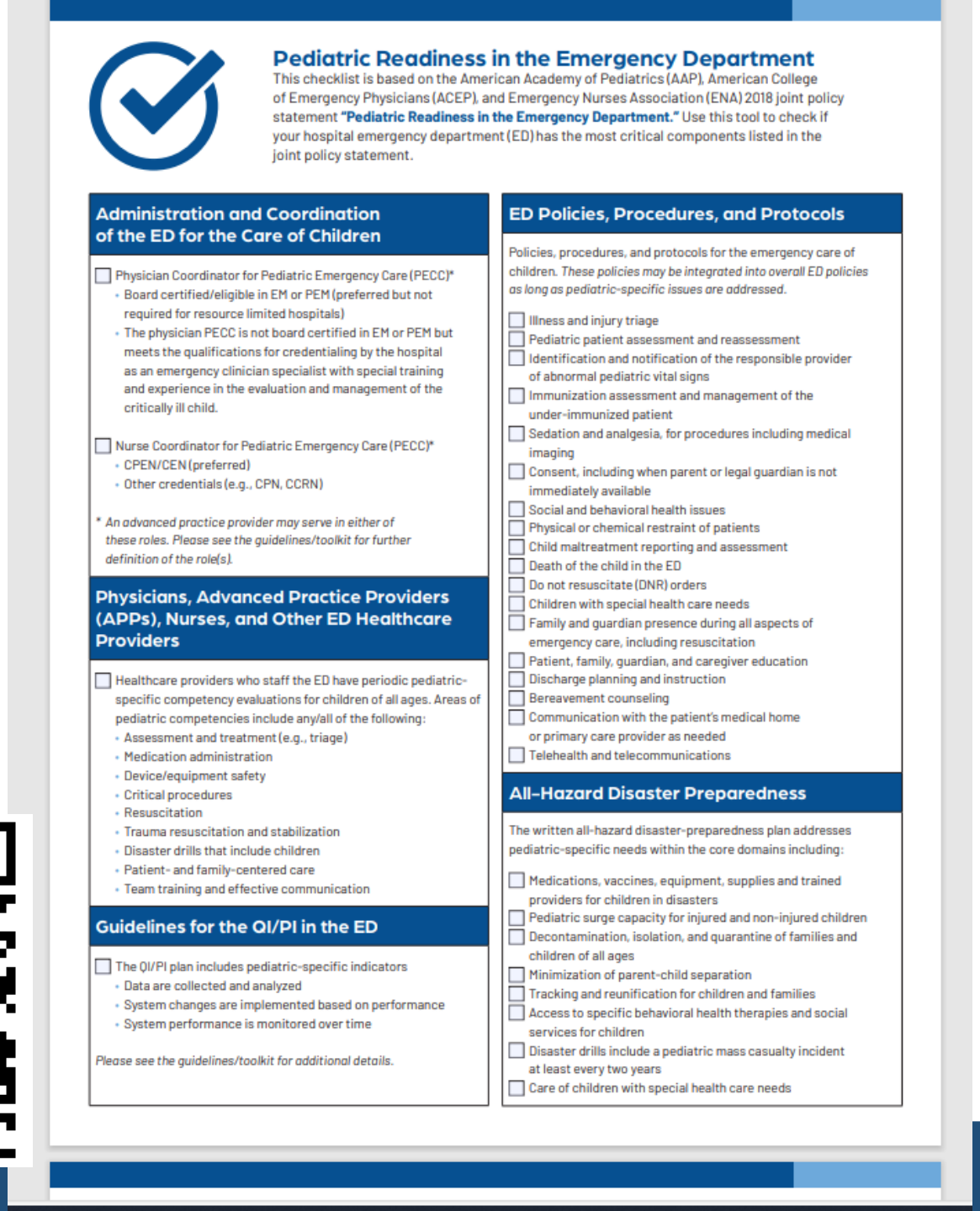
Resources for Optimal Care of the Injured Patient

- (2022 Standards)

  - Effective for visits starting September 2023
  - Standard 5.10 - Pediatric Readiness
    - **The NPRP assessment must be conducted once during the verification cycle**.
    - One cycle is defined as the thirty-six (36) month period preceding the expiration date of the current verification status.

Emergency Department Checklist

- View the checklist (updated 2024)
- A free resource for ED professionals based on the 2018 joint policy statement, “Pediatric Readiness in the Emergency Department”
- National focus on minimum criteria for ED pediatric readiness



Pediatric Readiness in the Emergency Department

This checklist is based on the American Academy of Pediatrics (AAP), American College of Emergency Physicians (ACEP), and Emergency Nurses Association (ENA) 2018 joint policy statement **“Pediatric Readiness in the Emergency Department.”** Use this tool to check if your hospital emergency department (ED) has the most critical components listed in the joint policy statement.

Administration and Coordination of the ED for the Care of Children

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

** An advanced practice provider may serve in either of these roles. Please see the guidelines/toolkit for further definition of the role(s).*

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

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

Guidelines for the QI/PI in the ED

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

Please see the guidelines/toolkit for additional details.

ED Policies, Procedures, and Protocols

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

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

All-Hazard Disaster Preparedness

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

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

Emergency Department Toolkit

- View the toolkit
- Includes the following 7 domains
    1. Administration and Coordination
    2. Healthcare Provider Competencies
    3. Quality and Process Improvement
    4. Policies, Procedures, and Protocols
    5. Support Services
    6. Guidelines for Improving Pediatric Safety
    7. Equipment, Supplies, and Medications

National PRP
Pediatric Readiness Project
Ensuring Emergency Care for All Children

National Pediatric Readiness Project
Ensuring Emergency Care for All Children

EMSC Emergency Medical Services for Children

The NPRP is funded in part by the HRSA EMSC Program

Florida 2021 National Pediatric Readiness State Summary

2021 Pediatric Readiness Response Rate

Numerator: **170**
Denominator: **295**
Response Rate: **58%**

2013-14 Pediatric Readiness Response Rate

Numerator: **127**
Denominator: **209**
Response Rate: **61%**

2021 Average State Score

75

State AVERAGE Hospital Score out of 100
(n=170)

2021 Median State Score

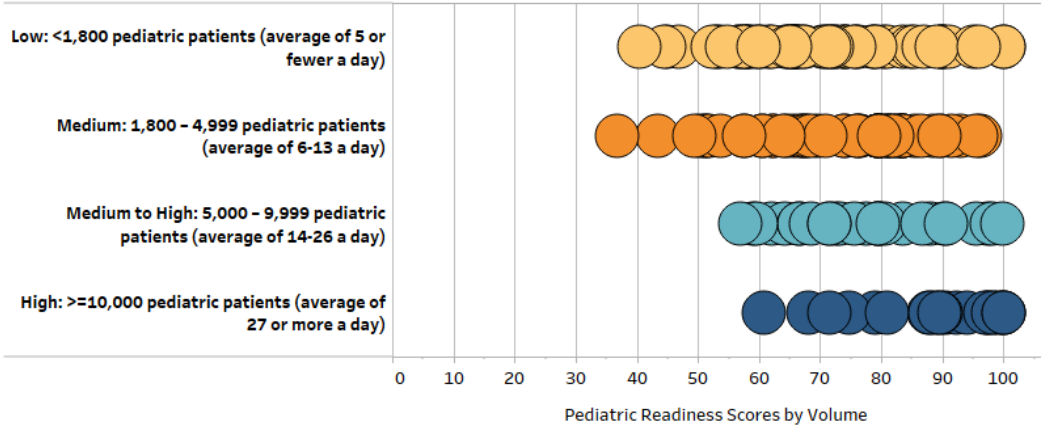
76

State MEDIAN Hospital Score out of 100
(n=170)

The overall 2021 National Pediatric Readiness scores (based on the 2018 Joint Policy Guidelines) are not directly comparable with the 2013-14 state scores (based on the 2009 Joint Policy Guidelines). These were two unique assessments based on two different published sets of guidelines. Questions were added/removed and point values changed based on the new guidelines. Although the overall scores are not comparable, several individual questions remained the same and these components can be compared over time.

Filter chart below by urbanicity:
All

2021 Distribution of Scores by Volume



National Pediatric Readiness Project
Ensuring Emergency Care for All Children

EMSC Emergency Medical Services for Children

The NPRP is funded in part by the HRSA EMSC Program

2021 National Pediatric Readiness Gap Report

2021 National Pediatric Readiness Response Rate

Numerator: 3,647
Denominator: 5,150
Response Rate: 70.8%

2013-14 National Pediatric Readiness Response Rate

Numerator: 4,150
Denominator: 5,017
Response Rate: 82.7%

2021 Average National Score

71

National AVERAGE Hospital Score out of 100
(n=3,557)

2021 Median National Score

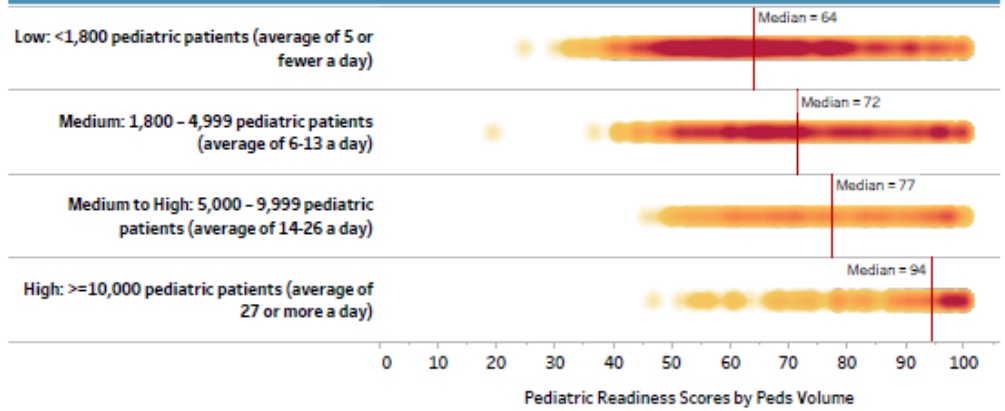
70

National MEDIAN Hospital Score out of 100
(n=3,557)

The overall 2021 National Pediatric Readiness scores (based on the 2018 Joint Policy Guidelines) are not directly comparable with the 2013-14 national scores (based on the 2009 Joint Policy Guidelines). These were two unique assessments based on two different published sets of guidelines. Questions were added/removed and point values changed based on the new guidelines. Although the overall scores are not comparable, several individual questions remained the same and these components can be compared over time.

NOTE: There are 89 records in this dataset that did not have answers to all the scored questions and are not included in the scores shown above.

2021 Distribution of National Scores by Volume



Guidelines for Policies, Procedures, and Protocols for the ED (17 points)

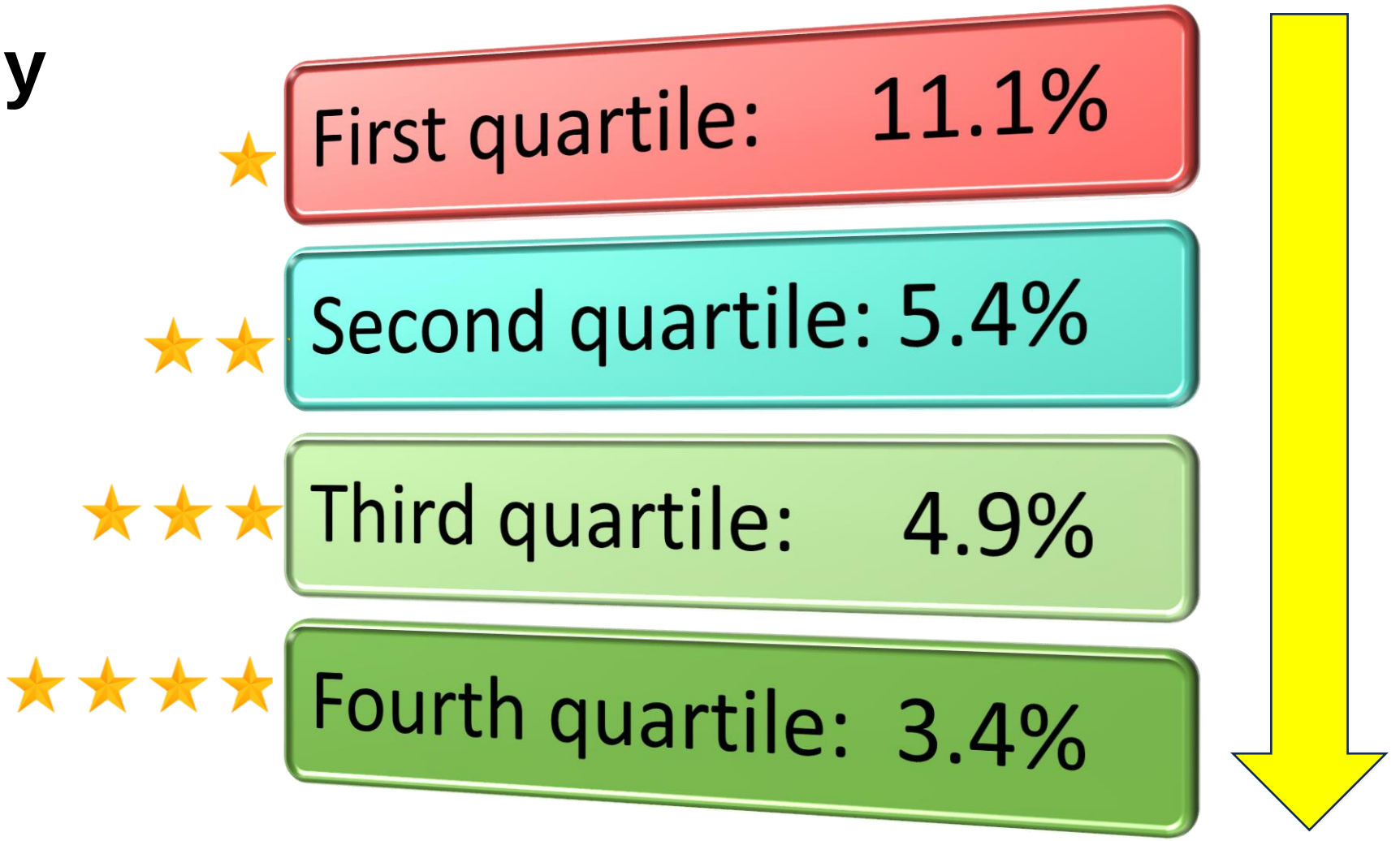
	KPI	2021 Number of EDs that Have Item	2021 Percent that Have Item	2013-14 Percent that Had Item	Difference Between Assessments
Involving families and caregivers in medication safety processes	▲	118/170 (Missing = 0)	69.4%		
Family and guardian presence during all aspects of emergency care, including resuscitation	▲	123/170 (Missing = 0)	72.4%		
Education of the patient, family, and caregivers on treatment plan and disposition	▲	124/170 (Missing = 0)	72.9%		
Bereavement counseling	◆	98/170 (Missing = 0)	57.6%		
Disaster plan includes availability of medications, vaccines, equipment, supplies, and appropriately trained providers	◆	73/170 (Missing = 0)	42.9%		
Disaster plan includes decontamination, isolation, and quarantine of families and children	◆	75/170 (Missing = 0)	44.1%		
Disaster plan includes minimization of parent-child separation and methods for reuniting separated children with their families	◆	75/170 (Missing = 0)	44.1%		
All disaster drills include pediatric patients	◆	70/170 (Missing = 0)	41.2%		
Disaster plan includes pediatric surge capacity for both injured and non-injured children	◆	70/170 (Missing = 0)	41.2%		
Disaster plan includes access to behavioral health resources for children	◆	65/170 (Missing = 0)	38.2%		
Disaster plan includes care of children with special health care needs	◆	69/170 (Missing = 0)	40.6%		
Written inter-facility transfer guidelines	●	136/170 (Missing = 0)	80.0%	86.5%	-6.5% ▼

Guidelines for Policies, Procedures, and Protocols for the ED (17 points)

	KPI	2021 Number of EDs that Have Item	2021 Percent that Have Item	2013-14 Percent that Had Item	Difference Between Assessments
Involving families and caregivers in medication safety processes	◆	2,060/3,636 (Missing = 10)	56.7%		
Family and guardian presence during all aspects of emergency care, including resuscitation	◆	2,131/3,636 (Missing = 10)	58.6%		
Education of the patient, family, and caregivers on treatment plan and disposition	▲	2,228/3,636 (Missing = 10)	61.3%		
Bereavement counseling	◆	1,672/3,635 (Missing = 11)	46.0%		
Disaster plan includes availability of medications, vaccines, equipment, supplies, and appropriately trained providers	◆	1,556/3,635 (Missing = 11)	42.8%		
Disaster plan includes decontamination, isolation, and quarantine of families and children	◆	1,616/3,635 (Missing = 11)	44.5%		
Disaster plan includes minimization of parent-child separation and methods for reuniting separated children with their families	◆	1,580/3,636 (Missing = 10)	43.5%		
All disaster drills include pediatric patients	◆	1,359/3,636 (Missing = 10)	37.4%		
Disaster plan includes pediatric surge capacity for both injured and non-injured children	◆	1,457/3,636 (Missing = 10)	40.1%		
Disaster plan includes access to behavioral health resources for children	◆	1,400/3,637 (Missing = 9)	38.5%		
Disaster plan includes care of children with special health care needs	◆	1,368/3,636 (Missing = 10)	37.6%		
Written inter-facility transfer guidelines	▲	2,603/3,639 (Missing = 7)	71.5%	70.5%	1.0% ▲

Quartiles of Readiness

Mortality by Quartile

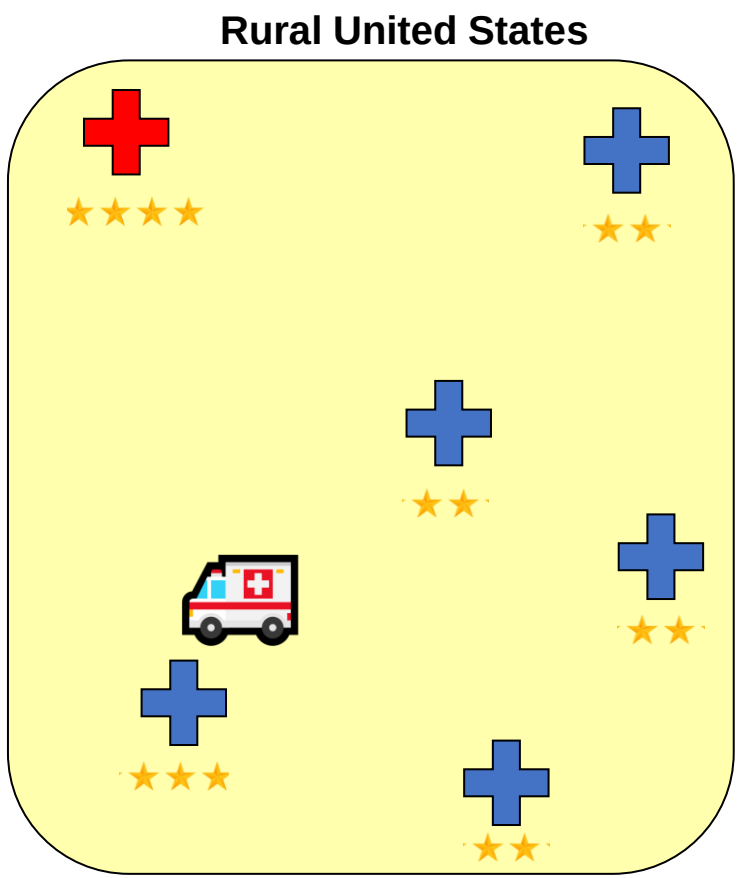


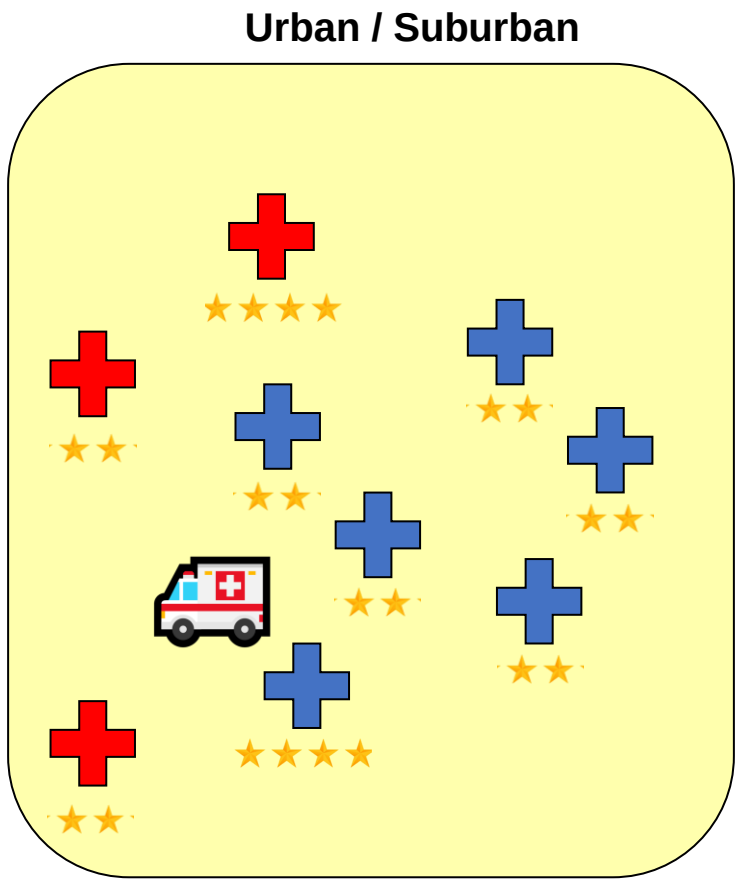
30% of Children Live More than 30 minutes from a High-Readiness ED

JAMA Netw Open. 2023;6(1):e2250941. doi:10.1001/jamanetworkopen.2022.50941

Peds ED

ED



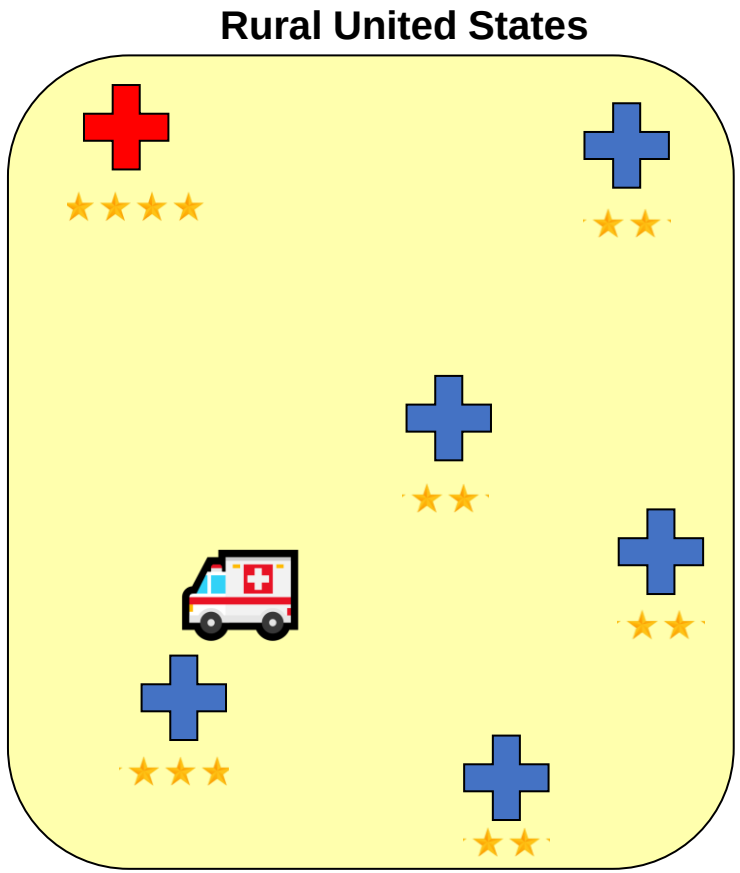


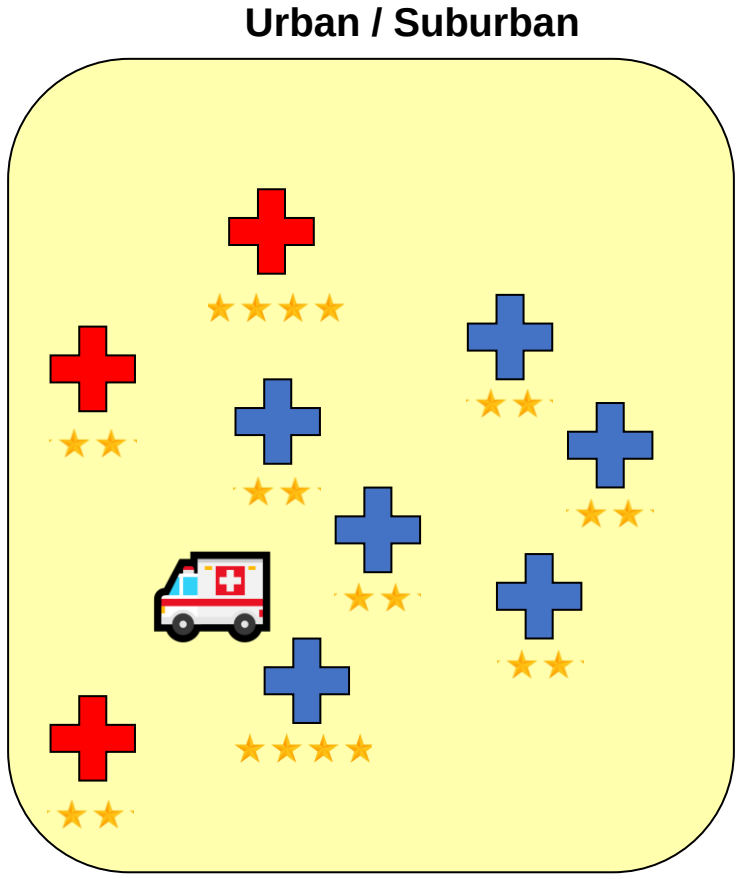
27% of Children Transported by Ambulance Do Not Have a High-Readiness ED Available

JAMA Netw Open. 2023;6(1):e2250941. doi:10.1001/jamanetworkopen.2022.50941

Peds ED

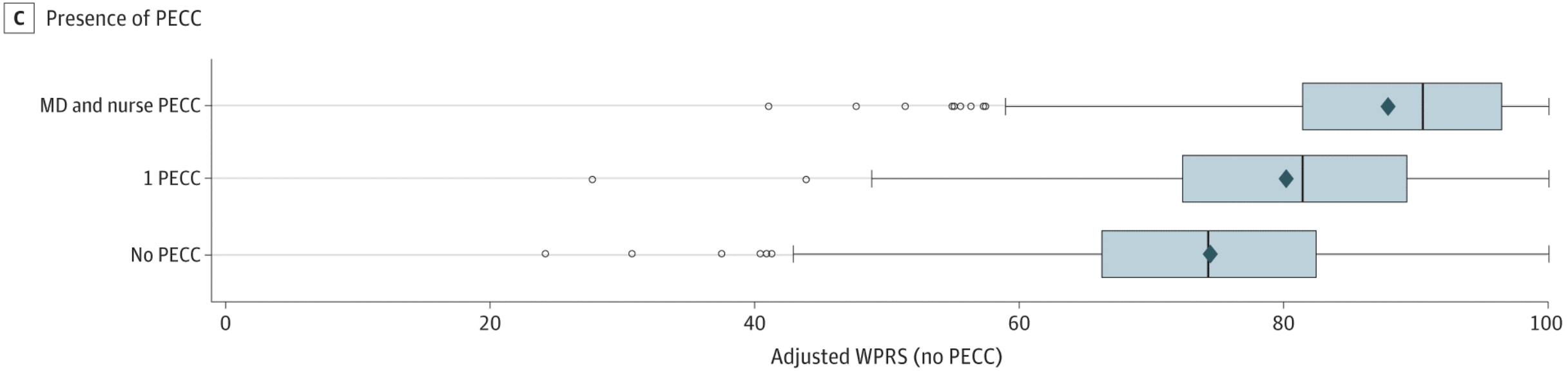
ED





National Assessment of Pediatric Readiness of US Emergency Departments During the COVID-19 Pandemic

JAMA Netw Open. 2023;6(7):e2321707. doi:10.1001/jamanetworkopen.2023.21707



Having PECCs Matters

Prehospital Pediatric Readiness Project (PPRP)

For EMS agencies

National PRP
Prehospital Pediatric Readiness Project
Ensuring Emergency Care for All Children

Prehospital Pediatric Readiness Checklist

- View the checklist
- A free resource for EMS professionals based on the 2020 joint policy statement, "Pediatric Readiness in Emergency Medical Services Systems"

National PRP
Prehospital Pediatric Readiness Project
Ensuring Emergency Care for All Children

Prehospital Pediatric Readiness Checklist

This checklist is based on the 2020 joint policy statement **"Pediatric Readiness in Emergency Medical Services Systems"**, co-authored by the American Academy of Pediatrics (AAP), American College of Emergency Physicians, Emergency Nurses Association, National Association of EMS Physicians, and National Association of EMTs. Additional details can be found in the AAP Technical Report **"Pediatric Readiness in Emergency Medical Services Systems"**.

Use this tool to check if your EMS or fire-rescue agency is ready to care for children as recommended in the policy statement and technical report. Consider using resources compiled by the National Prehospital Pediatric Readiness Project Steering Committee when implementing the recommendations noted here, to include the **Prehospital Pediatric Readiness Toolkit**.

Education & Competencies for Providers

- ◯ Process(es) for ongoing pediatric specific education using one or more of the following modalities:
  - Classroom/in-person didactic sessions
  - Online/distributive education
  - Skills stations with practice using pediatric equipment, medication and protocols
  - Simulated events

Process for evaluating pediatric-specific competencies for the following types of skills:

- ◯ Psychomotor skills, such as, but not limited to:
  - Airway management
  - Fluid therapy
  - Medication administration
  - Vital signs assessment
  - Weight assessment for medication dosing and equipment sizing
  - Specialized medical equipment
- ◯ Cognitive skills, such as, but not limited to:
  - Patient growth and development
  - Scene assessment
  - Pediatric Assessment Triangle (PAT) to perform assessment
  - Recognition of physical findings in children associated with serious illness
- ◯ Behavioral skills, such as, but not limited to:
  - Communication with children of various ages and with special health care needs
  - Patient and family centered care
  - Cultural awareness
  - Health care disparities
  - Team communication

Equipment and Supplies

- ◯ Utilize national consensus recommendations to guide availability of equipment and supplies to treat all ages
- ◯ Process for determining competency on available equipment and supplies

Patient and Medication Safety

- ◯ Utilization of tools to reduce pediatric medication dosing and administration errors, such as, but not limited to:
  - Length based tape
  - Volumetric dosing guide
- ◯ Policy for the safe transport of children
- ◯ Equipment necessary for the safe transport of children

Patient- and Family-Centered Care in EMS

Partner with families to integrate elements of patient- and family-centered care in policies, protocols, and training, including:

- ◯ Using lay terms to communicate with patients and families
- ◯ Having methods for accessing language services to communicate with non-English speaking/nonverbal patients and family members
- ◯ Narrating actions, and alerting patients and caregivers before interventions are performed

Policies and procedures that facilitate:

- ◯ Family presence during resuscitation
- ◯ The practice of cultural or religious customs
- ◯ A family member or guardian to accompany a pediatric patient during transport

231128 | Revised 2/2/24

Policies, Procedures, and Protocols (to include Medical Oversight)

- ◯ Prearrival instructions identified in EMS dispatch protocols include pediatric considerations, when relevant, such as, but not limited to:
  - Respiratory distress
  - Cardiac arrest
  - Choking
  - Seizure
  - Altered consciousness
- ◯ Policies, procedures, and protocols include pediatric considerations, such as, but not limited to:
  - Policy on pediatric refusals
  - Pediatric assessment
  - Consent and treatment of minors
  - Recognition and reporting of child maltreatment
  - Trauma triage
  - Children with special health care needs
- ◯ Direct medical oversight integrates pediatric-specific knowledge
- ◯ Protocols (indirect medical oversight) include pediatric evidence when available
- ◯ Destination policy that integrates pediatric-specific resources

Quality Improvement (QI)/ Performance Improvement (PI)

- ◯ PI process includes pediatric encounters
- ◯ Pediatric-specific measures are included in the PI process
- ◯ Submission of EMS agency data to the state's prehospital patient care database
- ◯ Submitted data is compliant with the current version of NEMSIS (version 3.5 or higher)
- ◯ Process to track pediatric patient centered outcomes across the continuum of care, such as, but not limited to:
  - Transport destination
  - Secondary transport destination
  - ED and hospital disposition
  - ED and hospital diagnoses
  - Survival to hospital admission
  - Survival to hospital discharge

Interaction with Systems of Care

Policies, procedures, protocols, and performance improvement initiatives involve ongoing collaboration with:

- ◯ Pediatric emergency care
- ◯ Public health
- ◯ Family advocates

Plans and exercises for disasters or mass casualty incidents include:

- ◯ Care of pediatric patients, such as, but not limited to:
  - Pediatric mental health first aid
  - Pediatric disaster triage
  - Pediatric dosing of medications used as antidotes
  - Pediatric mass transport
- ◯ Tracking of unaccompanied children
- ◯ Family reunification
- ◯ Collaborate with external personnel or have internal staff focused on enhancing pediatric care, such as, but not limited to:
  - Pediatric emergency care coordinator (PECC)/champion
  - Regional PECC/pediatric champion
  - Pediatric advisory council(s)
  - Medical director with pediatric knowledge and experience
- ◯ Understand pediatric capabilities at local and/or regional emergency departments for children with the following types of conditions:
  - Medical emergency
  - Traumatic injury
  - Behavioral health emergency
- ◯ Policies and/or procedures for transfer of responsibility of patient care at destination

To provide feedback on this checklist, please email **pprp@emscimprovement.center**
For additional information on the Prehospital Pediatric Readiness Project (PPRP), visit:
https://emscimprovement.center/domains/prehospital-care/prehospital-pediatric-readiness

Prehospital Pediatric Readiness Toolkit

- View the toolkit
- Includes the following 7 domains
  - Education and Competencies
  - Equipment and Supplies
    - https://emscimprovement.center/domains/prehospital-care/prehospital-pediatric-readiness/pprp-toolkit/equipment/2020-equipment-ground-ambulances/
  - Patient and Medication Safety
  - Patient- and Family-Centered Care
  - Policies, Procedures, and Protocols (to include Medical Oversight)
  - Quality and Process Improvement
  - Interactions with Systems of Care

Recommended Essential Equipment for Basic Life Support and Advanced Life Support Ground Ambulances 2020: A Joint Position Statement

Addressing Gaps in Prehospital Pediatric Care

MAY						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24	25	26	27	28	29

JULY						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

National PRP
Prehospital Pediatric Readiness Project
Ensuring Emergency Care for All Children

Readiness Focus Areas

- Education and Competencies for Providers
- Equipment and Supplies
- Patient and Medication Safety
- Patient- and Family-Centered Care
- Policies, Procedures, and Protocols
- Quality Improvement / Performance Improvement
- Interactions with Systems of Care

National PRP
Prehospital Pediatric Readiness Project
Ensuring Emergency Care for All Children

Pediatric Disaster

PPN Mission and Vision

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 Disaster Care Centers of Excellence

- Funded by the Administration for Strategic Preparedness and Response (ASPR)
- Bring together children's hospitals, private and public entities, and national organizations
- Designed to disseminate best practices in pediatric disaster preparedness, response, and recovery on a regional level

Gulf 7 – Pediatric Disaster Network	Western Regional Alliance for Pediatric Emergency Management (WRAP-EM)	Region V for Kids *(formerly EGLPCDR)*
• Awarded in 2022 • Anchored at Texas Children's Hospital (Houston, TX) • 7 states/territories: Alabama, Florida, Georgia, Louisiana, Mississippi, Puerto Rico, Texas	• Awarded in 2019 • Anchored at UCSF Benioff Children's Hospital (Oakland, CA) • 6 states: Arizona, California, Nevada, Oregon, Utah, Washington	• Awarded in 2019 • Anchored at UH Rainbow Babies & Children's Hospital (Cleveland, OH) • 6 states: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

PPN Hub Sites and Key Partners

HRSA MCHB

ADVISORY COMMITTEES

EXECUTIVE CORE: PPN PI TEAM

NETWORK OPERATIONS TEAM

SERVICE CORES

- Analytics
- Community Engagement
- Education
- Communication/Dissemination
- Evaluation
- Health Equity
- Legal
- Quality Improvement
- Research & Innovation

Support Structure

CORE/EVERYDAY DOMAINS

- Infectious Diseases
- Medical Home
- Mental/Behavioral Health
- Pediatric Readiness
- Prehospital
- Telehealth
- Trauma/Burns

DISASTER MANAGEMENT DOMAINS

- Capacity/Capability (Surge)
- CBRN*
- Deployable Assets
- Drills/Exercises
- Health Information Portability
- Reunification
- Supply Chain

*CBRN: Chemical, Biological, Radiological, and Nuclear

OPERATIONS LEADERSHIP HUB SITE TEAMS

- Rainbow Babies & Children's – lead site
- Children's National Hospital - lead site
- Benioff Children's Hospitals
- Cardinal Glennon Children's Hospital
- Children's of Alabama
- Children's Mercy Kansas City
- Lurie Children's Hospital
- Norton Children's Hospital
- Primary Children's Hospital
- Seattle Children's Hospital

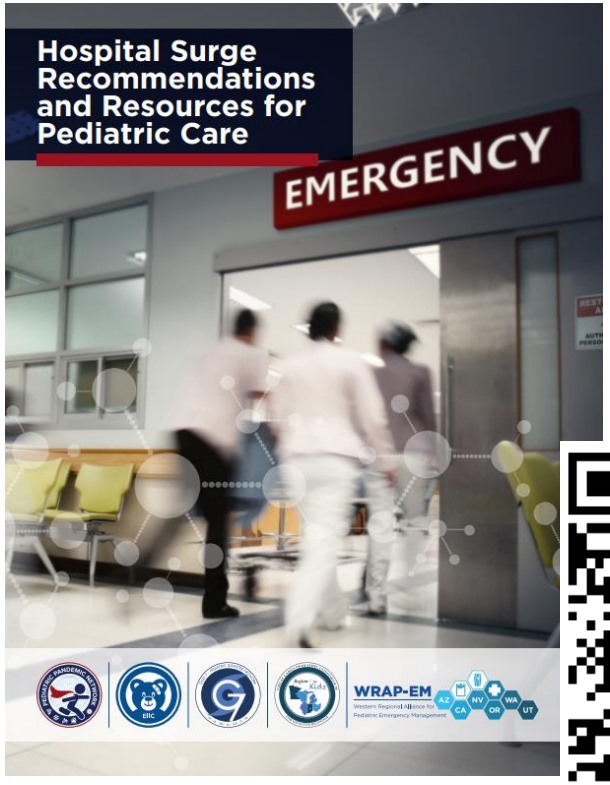
230405 . Revised 9/6/23

Building Bridges: Leveraging PPN and EMSC activities for a unified purpose

PPN Disaster Networking Collaborative	EMSC State Program Activities
Children's hospital pediatric disaster infrastructure	All hospital and EMS pediatric disaster preparedness
Developing regional networks	Grow hospital and EMS networks across the state
Growing the voice of children's hospitals	Ensuring all hospitals are ready to care for children
Standards for disaster preparedness among children's hospitals	Sharing readiness and preparedness resources

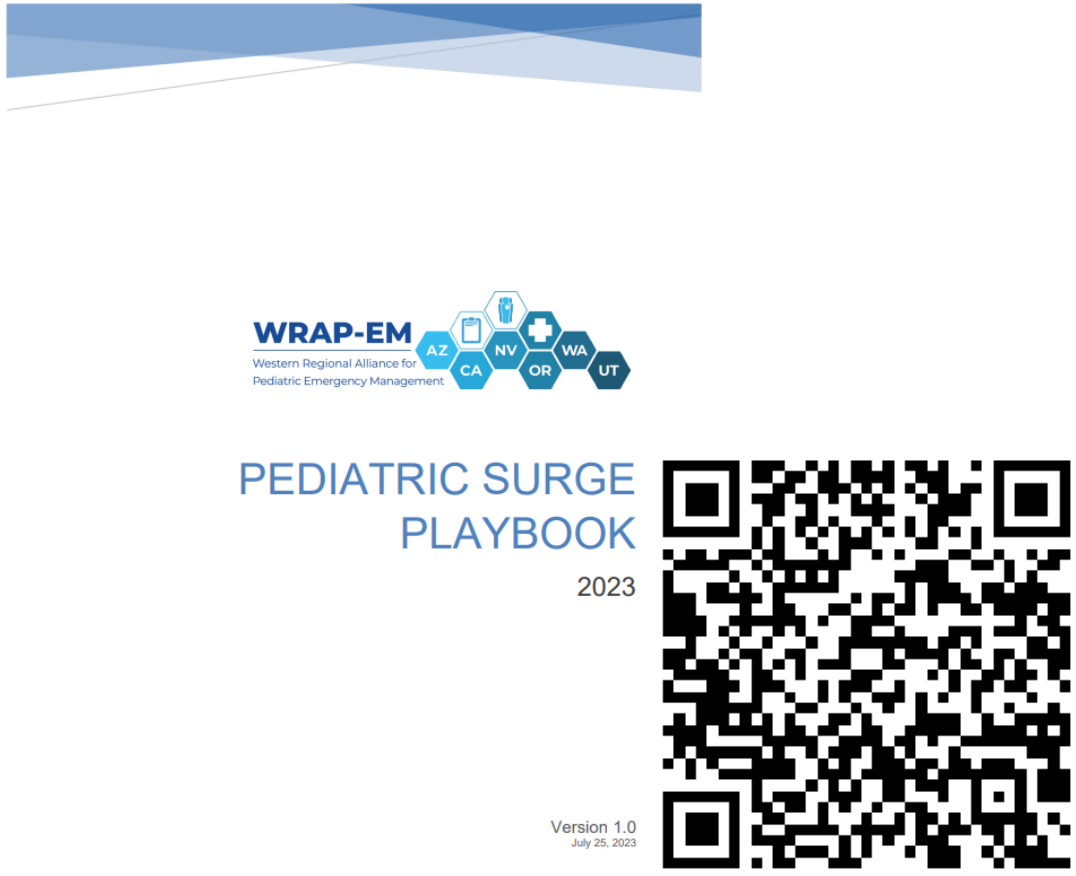
Hospital Surge Recommendations and Resources for Pediatric Care

- Compiled by pediatric experts from the PPN and the EIIC
- Designed to support immediate response to the ongoing surge of pediatric patients in children's and community hospitals and to guide planning and preparation for future surges
- To share additional suggested resources, email pediatricpandemicnetwork@gmail.com



WRAP-EM Pediatric Surge Playbook

- Designed to serve as a reference tool for pediatric surge management activities during, or in anticipation of, a surge incident
- Includes operational considerations, potential response strategies, and associated resources



Pediatric Preparedness for the Healthcare Professional

- **When?** August 13-14, 2024
- **Where?** Winnie Palmer Hospital in Orlando, Florida
- Register here

Pediatric Preparedness for the Healthcare Professional

August 13th – 14th, 2024

Where: Winnie Palmer Hospital (83 W. Miller St, Orlando, FL, 32806)

For: Medical response personnel, health care providers, and medical volunteers

CME, CNE and EMS CE available!

This free 2-day, 15-hour course is a standardized, national-level pediatric disaster training focused on emergency management, public health, clinical preparedness, and resiliency and recovery. At the successful completion of the course, participants will recognize components necessary to developing a comprehensive community and facility plan designed to improve pediatric clinical and post disaster resilience.

To register, visit the following link or scan this QR code:

https://cpd.education.bcm.edu/content/G7-pediatric-preparedness-florida-2024

ACCREDITATION/CREDIT DESIGNATION STATEMENTS

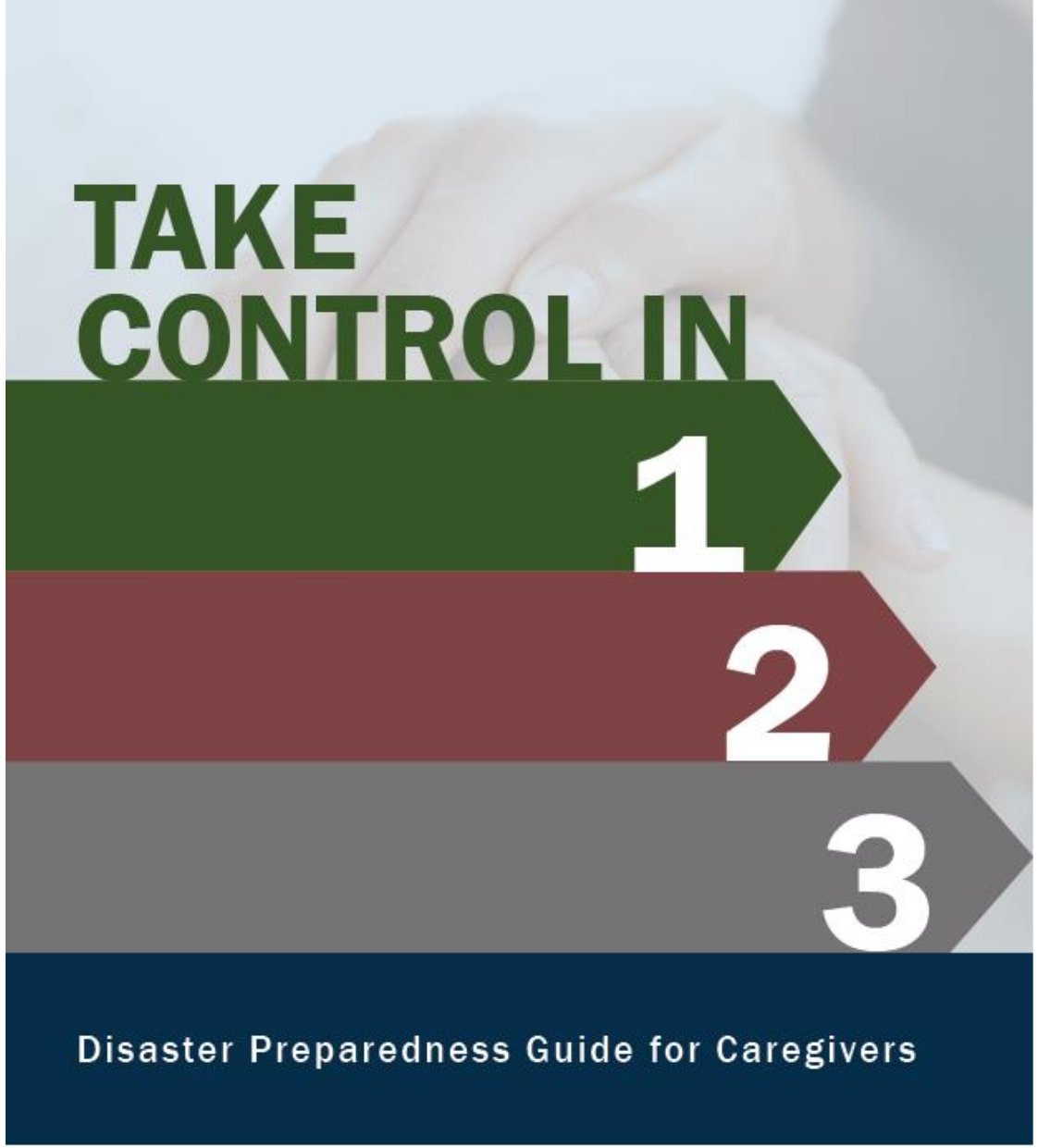
- Baylor College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. This activity is approved for *AMA PRA Category 1 Credits™*.
- Texas Children's Hospital is accredited with distinction as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation. This NCPD activity awards up to 15 contact hours.
- Educational credits for EMS Providers are being pursued for approval by the Texas Department of State Health Services (DSHS) through Provider #01828 TEEX: 200 Technology Way, College Station, TX.

Texas A&M Engineering TEEX Extension Service

Questions? Contact the Gulf 7 – Pediatric Disaster Network at: Marie.Kasbaum@bcm.edu

Disaster Preparedness Guide for Caregivers

The Federal Emergency Management Agency (FEMA.gov) and the Rosalynn Carter Institute for Caregivers (RCI) (rosalynncarter.org) created this *Disaster Preparedness Guide for Caregivers* to help you navigate the unique challenges that may arise when disasters strike



FEMA | Ready. | ROSALYNN FOR CARTER CAREGIVERS INSTITUTE

Ready. Prep. Go! Podcast

- From Pediatric Pandemic Network
- Features conversations with emergency, disaster and preparedness subject matter experts and those on the frontlines
  - FL to be featured in upcoming podcast
- New episodes drop every other Tuesday
- Learn more and listen to the first episode here

Disaster in Seconds Kit

- By Pedi-Ed-Trics™
- Disaster drills and triaging


anyone
can be
cool, but
awesome
takes
practice.

October 1st Wall Street Journal Bombshell


THE WALL STREET JOURNAL.

HEALTH | HEALTHCARE

Find Hospitals Deemed Ready to Treat Children in Your Area

Only 14% of U.S. emergency departments are certified as pediatric ready or specialize in kids, though standards vary widely—and many parents don't know where they are

By Melanie Evans Follow , Kara Dapena Follow , Liz Essley Whyte Follow , and Dov Friedman Follow

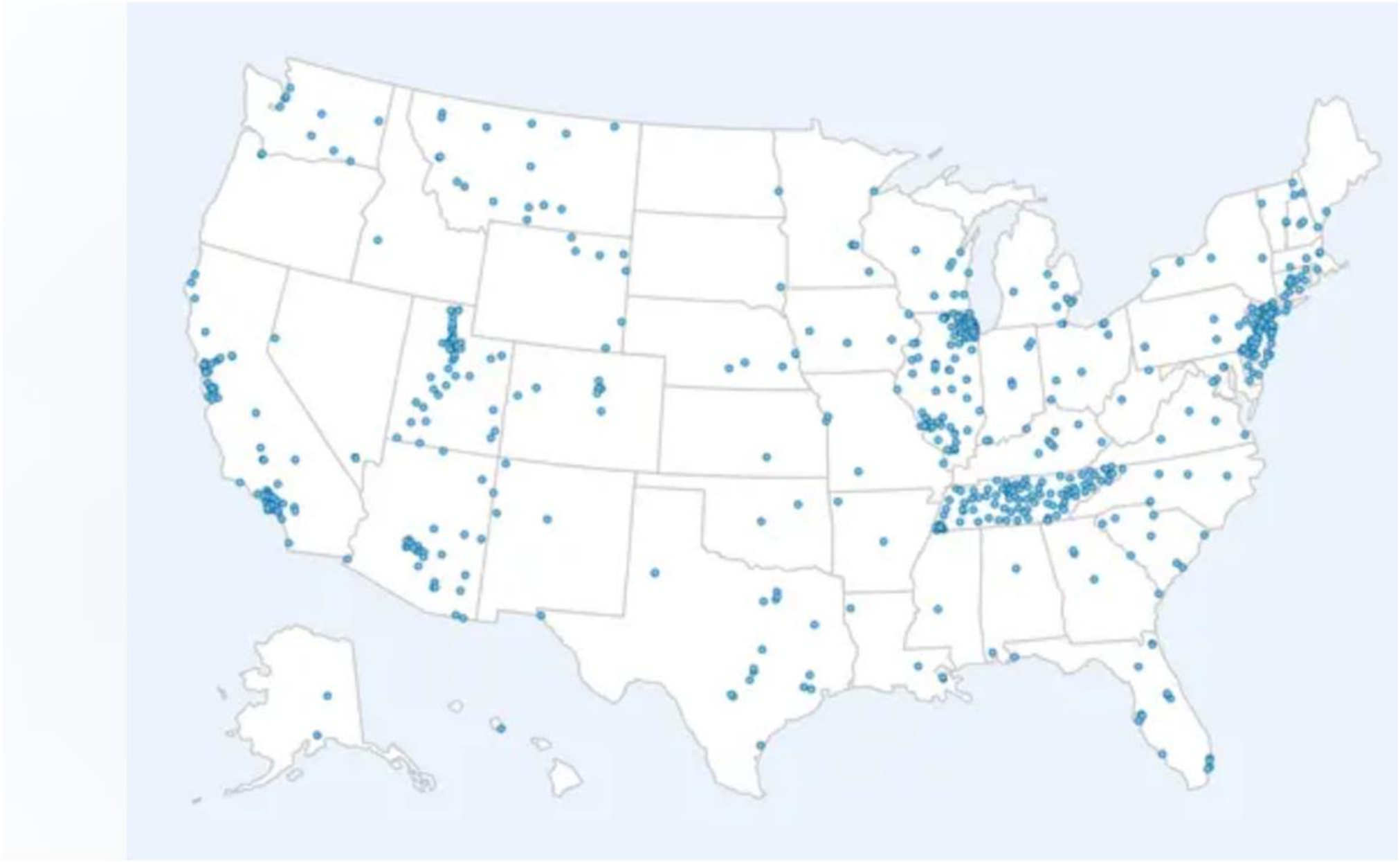
Oct. 1, 2023 5:30 am ET

SAVE SHARE TEXT

Pediatric-ready hospitals

[Find Hospitals Deemed Ready to Treat Children in Your Area - WSJ]

[Children Are Dying in Ill-Prepared Emergency Rooms Across America - WSJ]



Find Verified Hospitals Ready to Treat Children in Your Area

Response from EIIC and EDC

“We appreciate the opportunity to bring attention to gaps in pediatric emergency care. At the same time, we are disappointed that it ignores the significant progress made in recent years by both our State Partnership Programs and our nation’s EDs, especially in light of the challenges of COVID-19 – as outlined in our July research paper about the results of the 2021 NPRP assessment. The WSJ article also misses important nuances surrounding recognition programs, which are an effective but singular and evolving strategy to improve readiness. We are currently reaching out to the reporter to request clarification and/or correction on key items. Additionally, we are developing recognition program messaging, which we will share shortly. While we wish the story was more balanced, we anticipate it may drive greater interest in state pediatric readiness recognition programs. Most importantly, we are optimistic it may ultimately catalyze efforts toward our vision of high-quality, equitable emergency care for every child, every day.”

DONATE

HOME ABOUT US LEARN OUR WORK GET INVOLVED RESOURCES

Sign Our Petition! CLICK HERE TO SIGN

HELP ADAPT OUR EMERGENCY MEDICAL SERVICES (EMS) SYSTEMS FOR CHILDREN!

Many Emergency Rooms aren't fully prepared to care for children, but children seen at an ER with a high pediatric readiness score have a 30% lower mortality risk. LEARN MORE ›

A *Wall Street Journal* investigation highlights this important issue. READ ARTICLE ›

Please Join us For a Virtual Roundtable Discussion

Tuesday, January 16th 2024 | 12:00PM -1:30PM EST

Addressing the critical national crisis that directly affects all U.S. parents, caregivers, and future generations.

View Now

Breaking The Silence: U.S. EMS System is Failing Our Kids & It's Costing Their Lives

Mortality is Linked to the Lack of Pediatric Emergency Preparedness in U.S. Hospitals

R Baby Foundation was born for a single purpose: to save as many babies' lives as possible.

We're the first and only foundation focused on making sure every emergency room is prepared to give babies and children lifesaving care. Join us to help deliver optimal pediatric emergency training, research, treatment and equipment. **LEARN MORE ABOUT OUR WORK**

1,000,000+ children benefited annually

1200+ hospitals helped

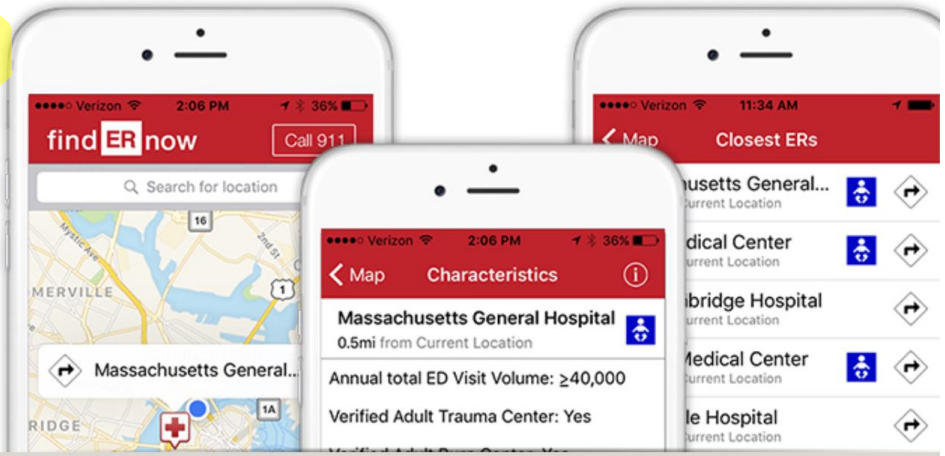
6500+ physicians train

100+ publications printed

125+ conferences held

1000+ support staff educated

findERnow



Events & Happenings

SEPTEMBER 21, 2022
R Baby's Sweet 16

LEARN MORE

What's New

JULY 07, 2023
Factors Associated With Improved Pediatric Resuscitative Care in General Emergency Departments

Pediatrics

READ ARTICLE

How You Can Help

1 Sign our petition!

Join other concerned parents and health care professionals to help adapt our Emergency Medical Services Systems (EMS) for children!

SIGN HERE

Resources

20 Things This One Mom Learned During Her First ER Trip With Her Child

Plain and simple, being a parent is scary, and sometimes kids do some really unexpected things that can land them in the hospital. Meanwhile, other parents may talk themselves down from worry when their child really does need attention. So take it from this one mom and a few emergency room doctors on what a trip to the ER is all about and when you should definitely go, without a doubt.

Moms.com

READ MORE

Newsletter

SPRING 2023
R Baby Celebrates 16 Years of Saving Lives!

BROWSE

FALL 2021
R Baby Foundation's Programs Are Saving Lives!

BROWSE

2 Volunteer

There are many ways you can help advance our cause.

ASK US HOW

3 Donate

90% of our fundraising goes toward the lifesaving grants we award. Help us save babies lives.

DONATE NOW

@rbabyfoundation
SHARE YOUR STORY

Tweets from @RBabyFoundation

Nothing to see here -

Ensuring high-quality, equitable emergency care for every child.

EMSC
Emergency Medical Services for Children

The Emergency Medical Services for Children (EMSC) Program is the only federal program dedicated to children's needs in health emergencies.

- Children's health needs are distinct from adults. They are more prone to medical errors and require specialized care.
- Because of low pediatric volume, emergency systems tend to focus on adult needs. They may lack the pediatric-specific skills, equipment, and policies to ensure high-quality care.

80%

- of EDs **see <10 children per day**[1]
- of EMS agencies **see <8 children per month**[2]

Our Approach

Since 1984, the EMSC Program has worked to improve gaps in pediatric emergency care. The program has five distinct arms encompassing 71 grants, which touch all 50 states plus seven territories and jurisdictions.

DATA	RESEARCH	INNOVATION	QUALITY IMPROVEMENT	INTEGRATION
Data Center (1 resource center)	Pediatric Emergency Care Applied Research Network (7 research nodes)	Targeted Issues Grants (5 projects)	Innovation and Improvement Center (1 resource center)	State Partnership Programs (57 programs)

BUILDING THE EVIDENCE BASE & **ACCELERATING EVIDENCE INTO PRACTICE** — **To improve care in your community**

Who We Serve

15,000+ EMS and Fire-Rescue Agencies (Prehospital Organizations)

&

5,000+ Emergency Departments, Trauma Centers (Hospitals)

30 MILLION Children & Their Families

Our Services & Resources

- Cutting-edge research
- National- and state-level data and analysis
- Assessment tools and gap reports
- Improvement resources, like toolkits
- Clinical resources and practice guidelines
- Policy and procedure development
- Quality improvement collaboratives
- Communities of practice
- Educational webinars
- Learning modules
- Disaster preparedness and planning resources
- Scholar and fellowship roles

Our Flagship Initiatives

Parallel pediatric readiness projects engage clinicians in cycles of measurement and improvement.

National PRP — Pediatric Readiness Project — Ensuring Emergency Care for All Children — **For EDs**

&

National PRP — Prehospital Pediatric Readiness Project — Ensuring Emergency Care for All Children — **For EMS**

Our Impact

A recent national assessment of pediatric capabilities of EDs found a median score of 69.5 out of 100. Research shows an ED score of >87 points is associated with the potential for:

76% lower mortality risk in ill children[3,4]

60% lower mortality risk in injured children[4]

AT LEAST 1,400 children's lives saved each year[4]

A prehospital assessment is forthcoming.

Pediatric readiness saves lives. Learn more:

View references here: https://bit.ly/EMSCoverviewref

This Emergency Medical Services for Children Innovation and Improvement Center resource is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award (U07MC37471) totaling $2.5M with 0 percent financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, visit HRSA.gov.

230726 . Updated 11/16/23

Florida EMSC

State Partnership Program

One Page Overview

Florida EMS for Children Advisory Committee

Appointed Positions

Physician with Pediatric Experience Tricia Swan, MD, M.ED, FAAP, FACEP Chair, ACEP Pediatric EM Section Associate Medical Director Pediatric Emergency Department, Advent Health Ocala	**Nurse with Emergency Pediatric Experience** Nichole Shimko, RN, MSN, CCRN, CPN, C-NPT Manager, Transport Team, Golisano Children's Hospital of Southwest Florida Representative, Florida Neonatal and Pediatric Transport Network Association (FNPTNA)
Emergency Medical Technician/Paramedic Barbara Tripp, RN, EMT-P Fire Chief, City of Tampa Fire Rescue	**Emergency Physician** Marshall Frank, DO, MPH, FACEP, FAEMS Medical Director, Sarasota County Fire Department
Family Advisory Network Representative Sandra Nasca, RN Retired Nurse and Forensic Medical Investigator, Child Advocate	

Liaisons

Florida Emergency Nurses Association Representative Penny Blake, MSN Ed, RN, CEN NICU/Pediatric Market Clinical Educator, St. Mary's Medical Center	**Emergency Department/Emergency Medical Services Pediatric Emergency Care Coordinator** Ernest (Sonny) Weishaupt, EMT-P EMS Liaison/PECC, Arnold Palmer Hospital for Children
Rural Emergency Medical Services Tracey D. Vause, MPA, CPM, EMT-P Chief of Emergency Services, Walton County Sheriff's Office Chair, Emerald Coast Healthcare Coalition	**Emergency Medical Services Pediatric Emergency Care Coordinator** Jeremiah Rabish, PMD EMS Operations Captain, Sarasota County Fire Department, SCFD PECC
Rural Emergency Medical Services Pediatric Emergency Care Coordinator Marvin Walters, PMD EMS Chief, Wakulla County Fire Rescue	**Disaster Preparedness** Julie Downey, EMT-P (retired) Fire Chief, Davie Fire Rescue Chair, EMS Advisory Disaster Response Committee

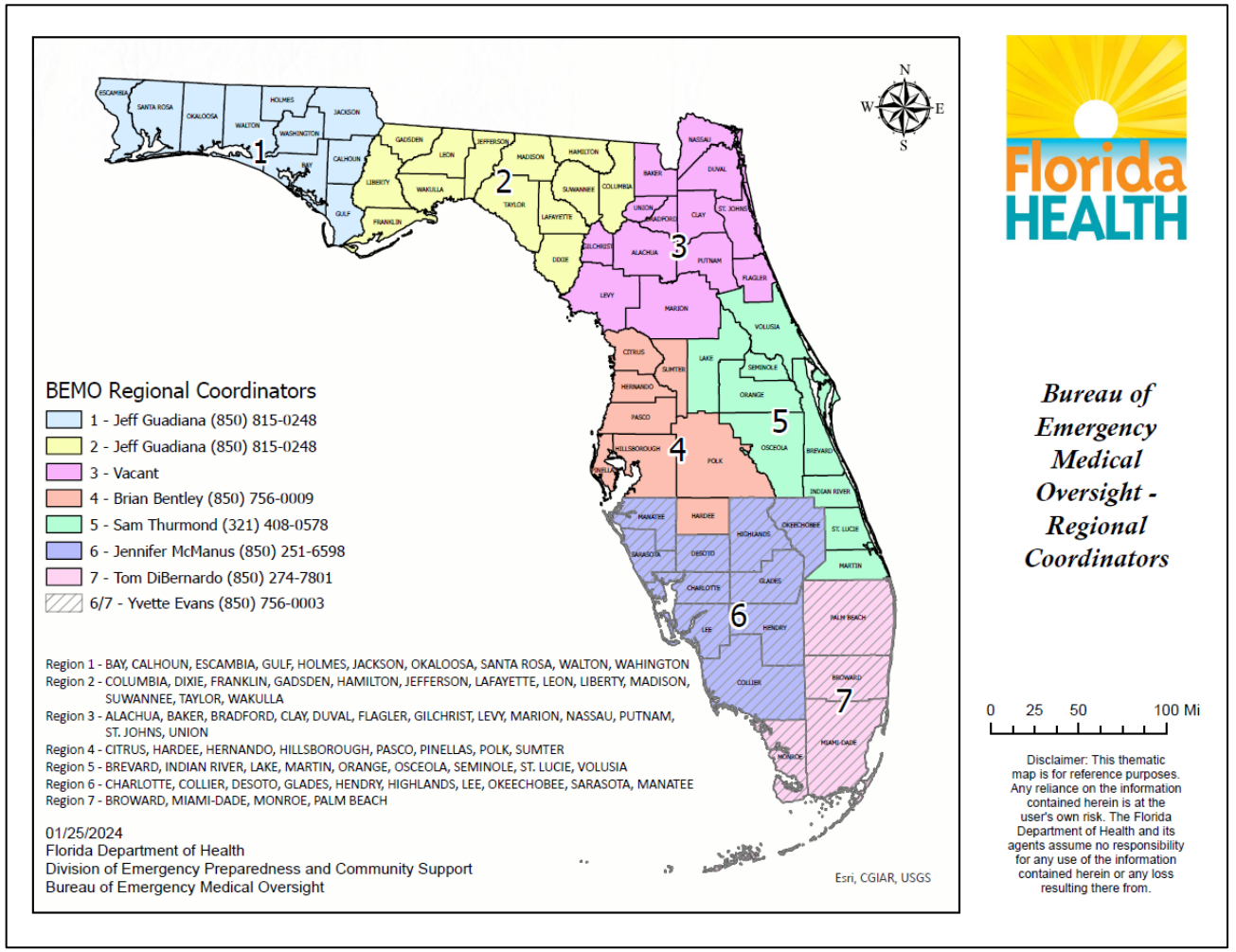
Liaisons Continued

Child Death and Children's Medical Services Brenna Radigan Prevention Specialist, Child Abuse Death Review Unit Division of Children's Medical Services, FDOH	**Pediatric Research and Data** Jennifer N. Fishe, MD Associate Professor, University of Florida COM-J Director UF Center for Data Solutions PECARN WPEMR Node Affiliate Researcher
Florida Trauma Program Manager Lisa Nichols, MBA, BSN, RN, CCRN-K Pediatric Trauma Program Manager, Wolfson Children's Hospital	**Mental Health** Lauren Young Work, LCSW Medical Social Work, MIH Coordinator Palm Beach County Fire Rescue

Florida EMS for Children Program Staff

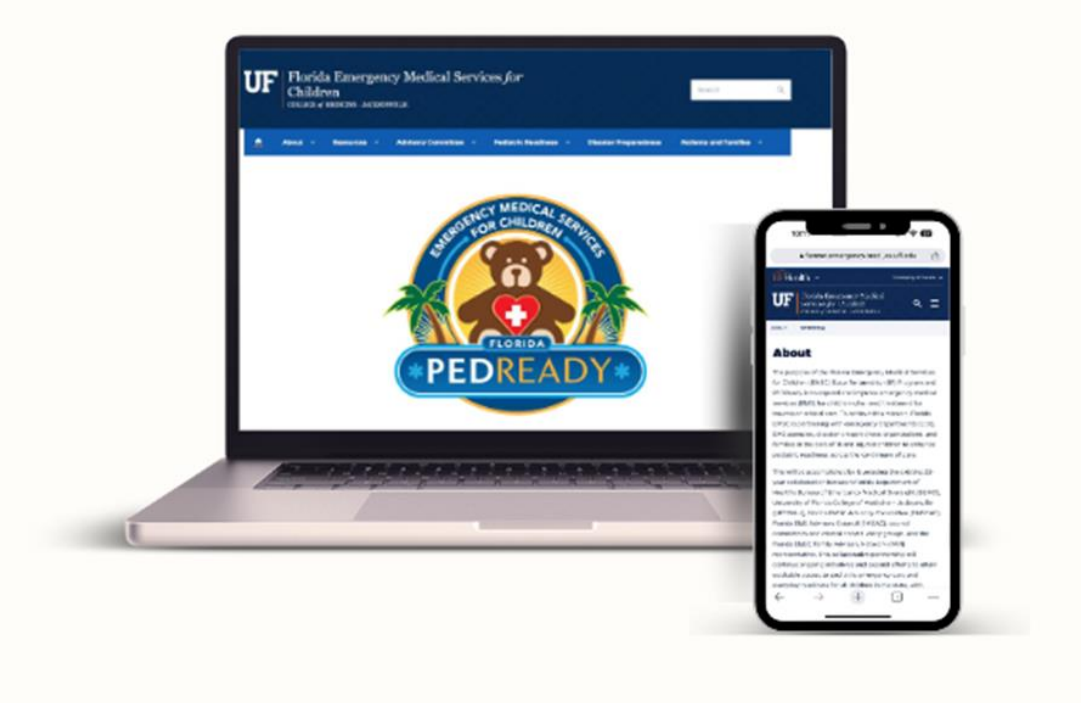
Florida Emergency Medical Services for Children State Partnership Program Project Director (UF) **Florida EMSC Medical Director** **Chair, Florida EMSC Advisory Committee** Phyllis L. Hendry, MD, FAAP, FACEP Professor of Emergency Medicine and Pediatrics Associate Chair for EM Research University of Florida COM-Jacksonville	**Florida Emergency Medical Services for Children State Partnership Program/PEDReady Program Manager** Katelyn Perl, MS, CHES® Project Manager I Department of Emergency Medicine University of Florida COM-Jacksonville
Megan Curtis Gonzalez, PhD Associate Director of Clinical Research Department of Emergency Medicine University of Florida COM-Jacksonville	Morgan Henson Campobasso, MPH, CPH, CCRP Assistant Director of Clinical Research Department of Emergency Medicine University of Florida COM-Jacksonville
Amy Kennedy Florida EMSC Administrative Specialist Department of Emergency Medicine University of Florida COM-Jacksonville	

Role of State EMS Regional Coordinators in EMSC



Florida EMSC Website

- **About** (funding statement/disclaimer, performance measures, partners)
- **Resources** (data and maps, educational materials, events, E-newsletter, pediatric emergency topics, podcasts and apps)
- **EMSC Advisory Committee** (meeting information, members, state plan)
- **Pediatric Readiness for EDs and EMS Agencies** (PECCs, National and Prehospital Pediatric Readiness Projects, state and national survey results)
- **Disaster Preparedness** (resources)
- **Patient and Families** (Family Advisory Network, resources)



Let us know what we're missing!

Social Media

Facebook

@floridaemsforchildren

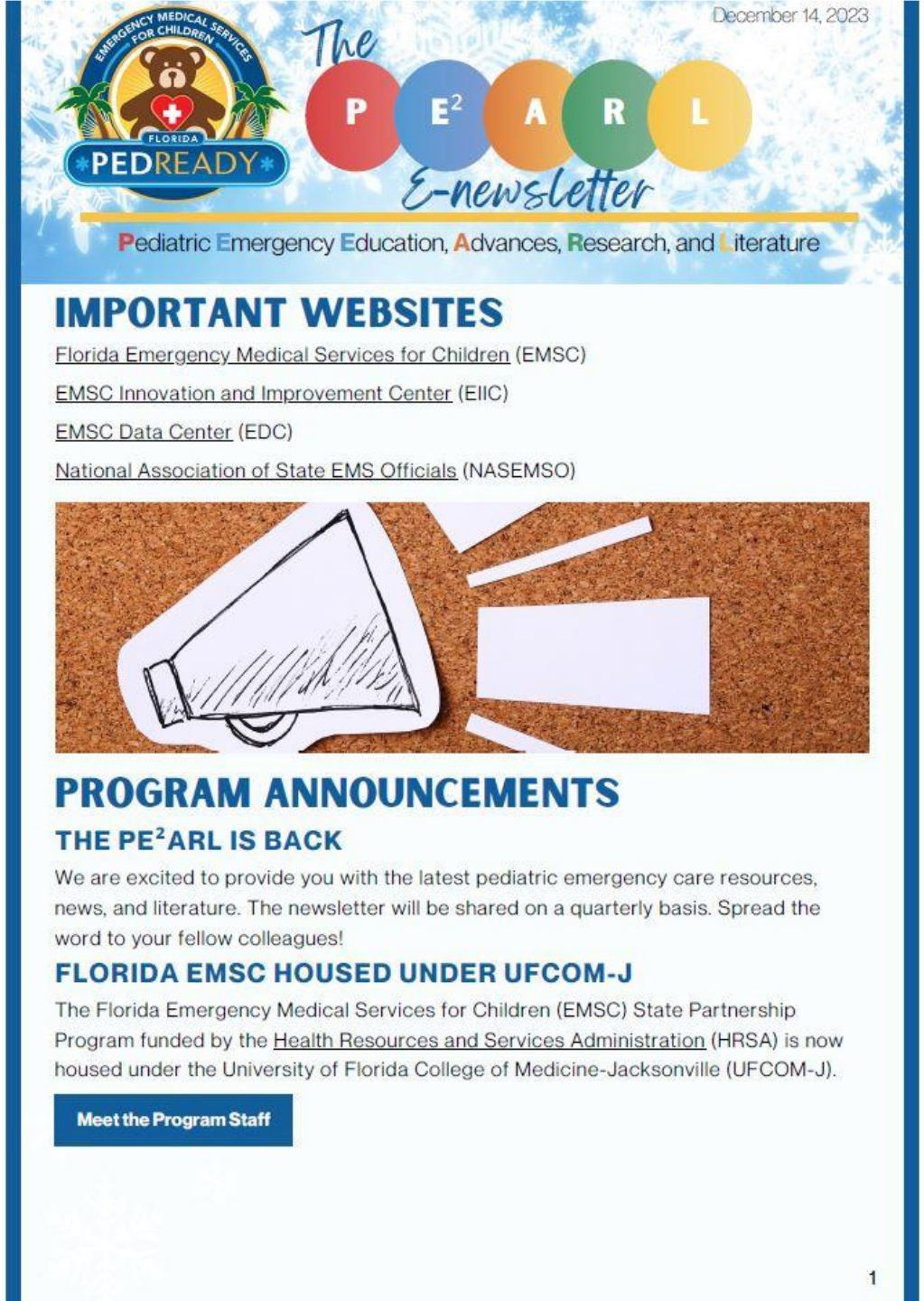
Instagram

@flemsforchildren

Tag us in your pediatric related posts!

The PE²ARL E-newsletter

- Disseminated quarterly
- Check out the Winter Issue 2023
- Spring Issue 2024 coming soon
  - To receive future issues and other Florida EMSC updates, email pedready@jax.ufl.edu



December 14, 2023

The PE²ARL E-newsletter

Pediatric Emergency Education, Advances, Research, and Literature

IMPORTANT WEBSITES

Florida Emergency Medical Services for Children (EMSC)

EMSC Innovation and Improvement Center (EIIC)

EMSC Data Center (EDC)

National Association of State EMS Officials (NASEMSO)

PROGRAM ANNOUNCEMENTS

THE PE²ARL IS BACK

We are excited to provide you with the latest pediatric emergency care resources, news, and literature. The newsletter will be shared on a quarterly basis. Spread the word to your fellow colleagues!

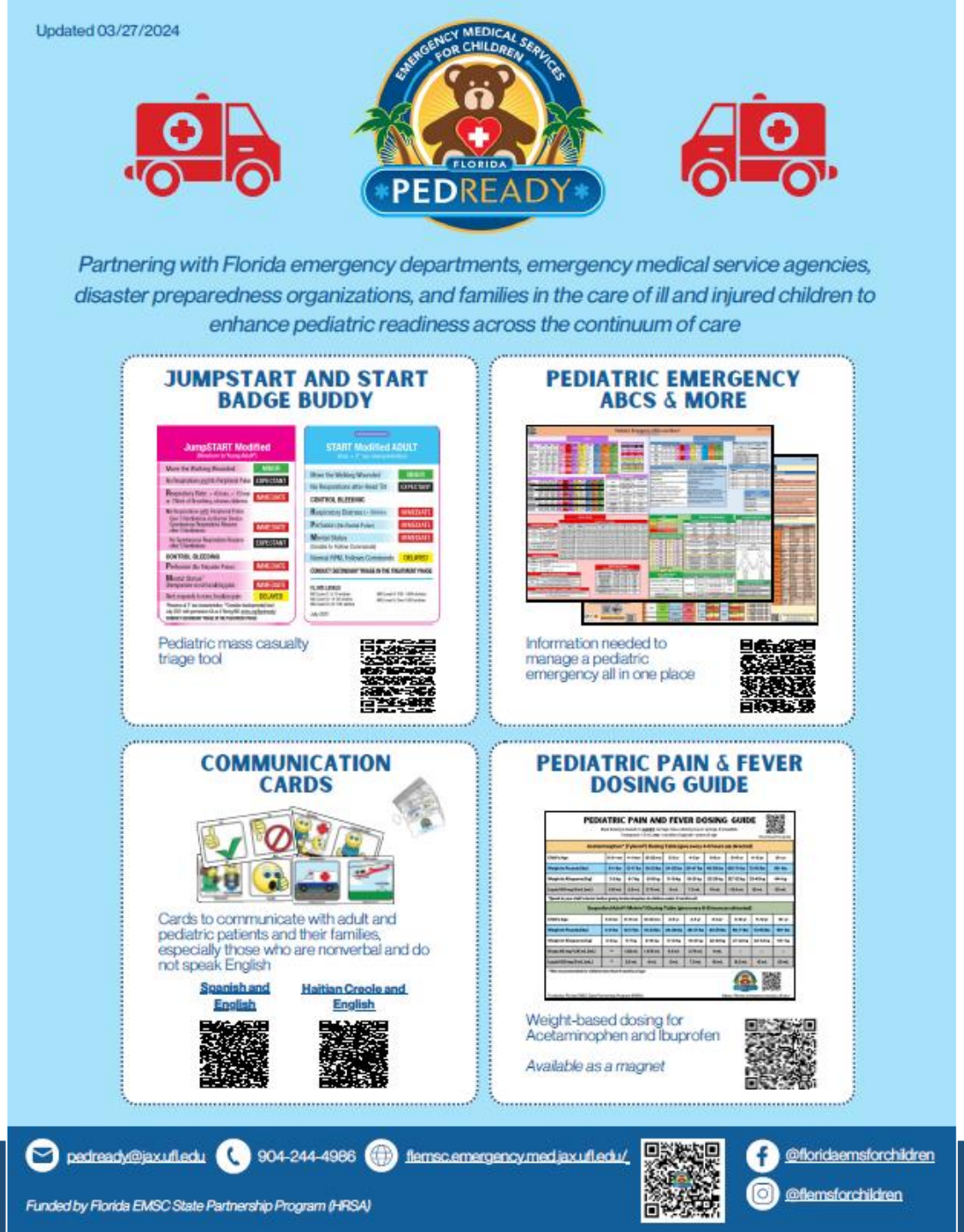
FLORIDA EMSC HOUSED UNDER UFCOM-J

The Florida Emergency Medical Services for Children (EMSC) State Partnership Program funded by the Health Resources and Services Administration (HRSA) is now housed under the University of Florida College of Medicine-Jacksonville (UFCOM-J).

Meet the Program Staff

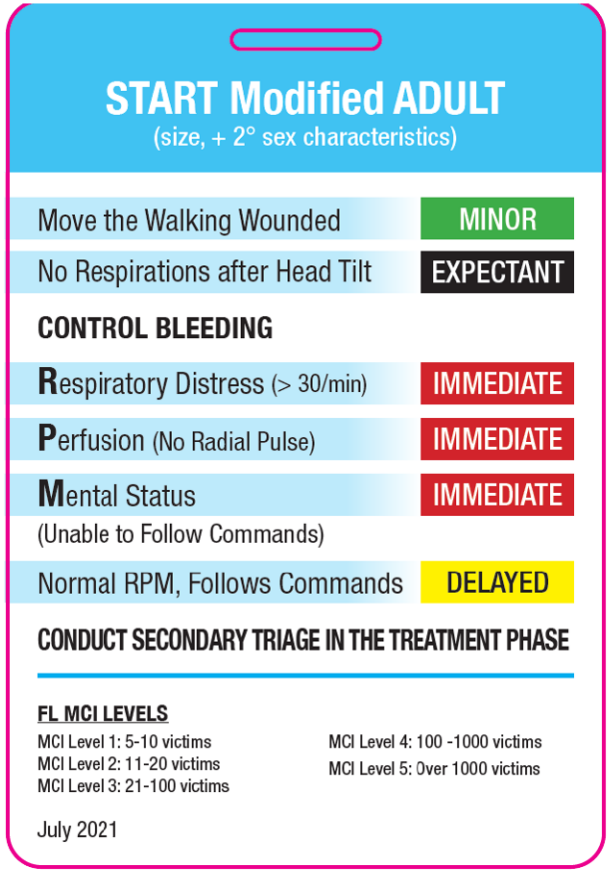
1

Resources Flyer (updated)



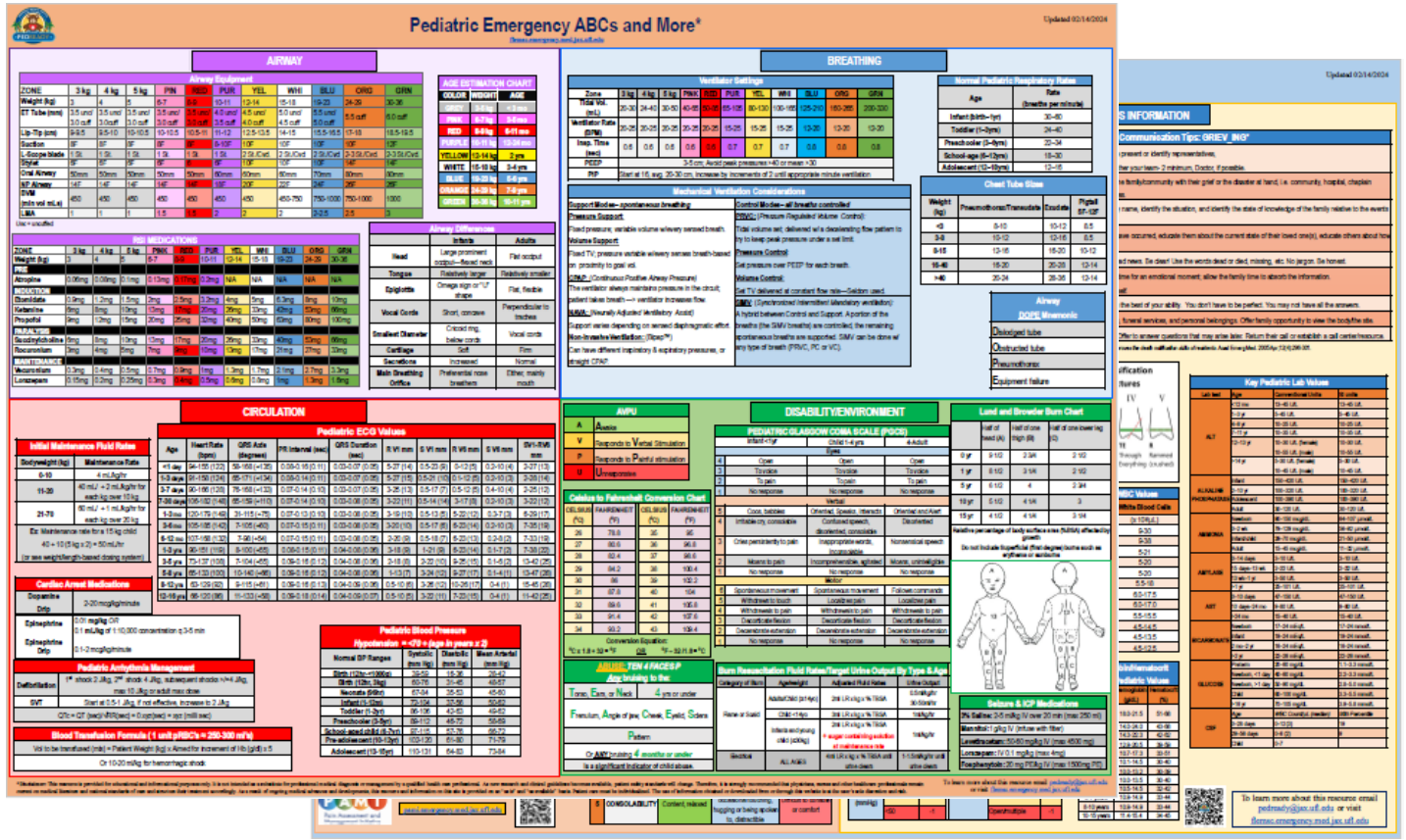
Modified JumpSTART and START Badge Buddy

Disseminated >10,000 to FL EMS, EDs, hospitals, and professional schools



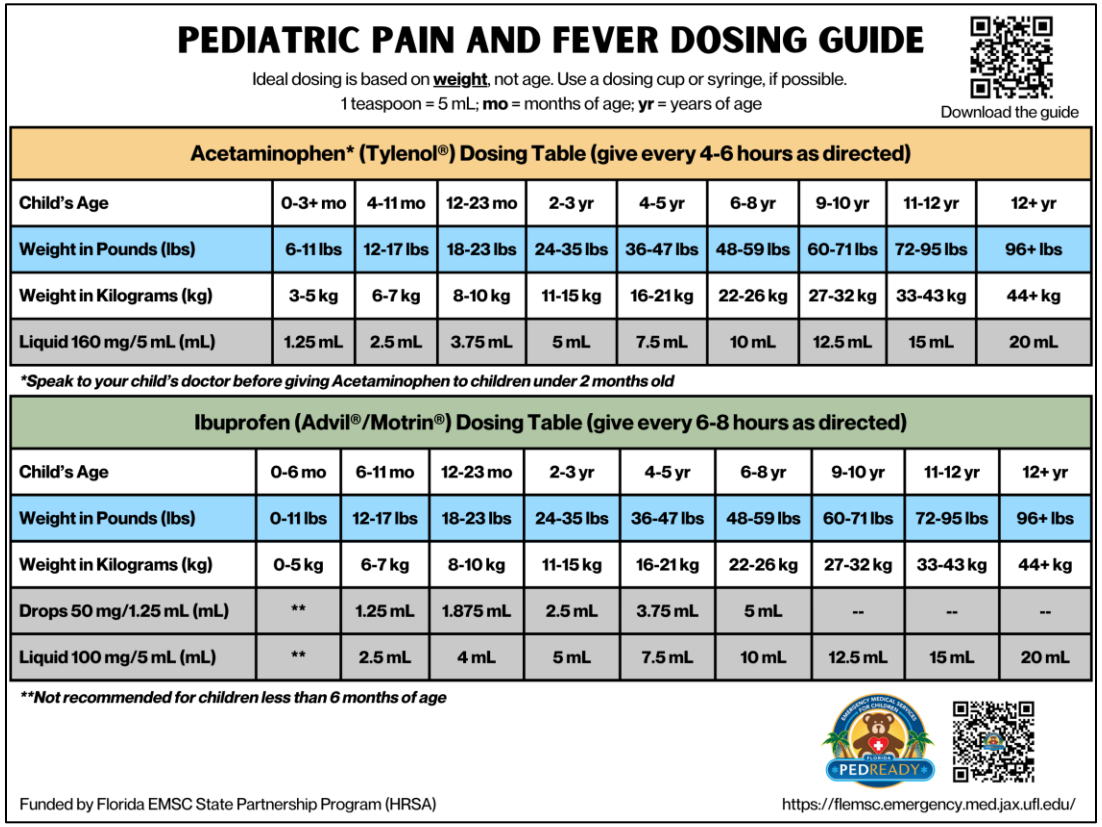
Pediatric Emergency ABCs and More

- Possible next steps
  - Badge buddy
  - Card



Pediatric Pain and Fever Dosing Guide

- Liquid only and based on weight
- Available as magnets and for download on Florida EMSC website here



PEDIATRIC PAIN AND FEVER DOSING GUIDE

Ideal dosing is based on **weight**, not age. Use a dosing cup or syringe, if possible.
1 teaspoon = 5 mL; **mo** = months of age; **yr** = years of age

Download the guide

Acetaminophen* (Tylenol®) Dosing Table (give every 4-6 hours as directed)

Child's Age	0-3+ mo	4-11 mo	12-23 mo	2-3 yr	4-5 yr	6-8 yr	9-10 yr	11-12 yr	12+ yr
Weight in Pounds (lbs)	6-11 lbs	12-17 lbs	18-23 lbs	24-35 lbs	36-47 lbs	48-59 lbs	60-71 lbs	72-95 lbs	96+ lbs
Weight in Kilograms (kg)	3-5 kg	6-7 kg	8-10 kg	11-15 kg	16-21 kg	22-26 kg	27-32 kg	33-43 kg	44+ kg
Liquid 160 mg/5 mL (mL)	1.25 mL	2.5 mL	3.75 mL	5 mL	7.5 mL	10 mL	12.5 mL	15 mL	20 mL

**Speak to your child's doctor before giving Acetaminophen to children under 2 months old*

Ibuprofen (Advil®/Motrin®) Dosing Table (give every 6-8 hours as directed)

Child's Age	0-6 mo	6-11 mo	12-23 mo	2-3 yr	4-5 yr	6-8 yr	9-10 yr	11-12 yr	12+ yr
Weight in Pounds (lbs)	0-11 lbs	12-17 lbs	18-23 lbs	24-35 lbs	36-47 lbs	48-59 lbs	60-71 lbs	72-95 lbs	96+ lbs
Weight in Kilograms (kg)	0-5 kg	6-7 kg	8-10 kg	11-15 kg	16-21 kg	22-26 kg	27-32 kg	33-43 kg	44+ kg
Drops 50 mg/1.25 mL (mL)	**	1.25 mL	1.875 mL	2.5 mL	3.75 mL	5 mL	--	--	--
Liquid 100 mg/5 mL (mL)	**	2.5 mL	4 mL	5 mL	7.5 mL	10 mL	12.5 mL	15 mL	20 mL

***Not recommended for children less than 6 months of age*

PEDREADY

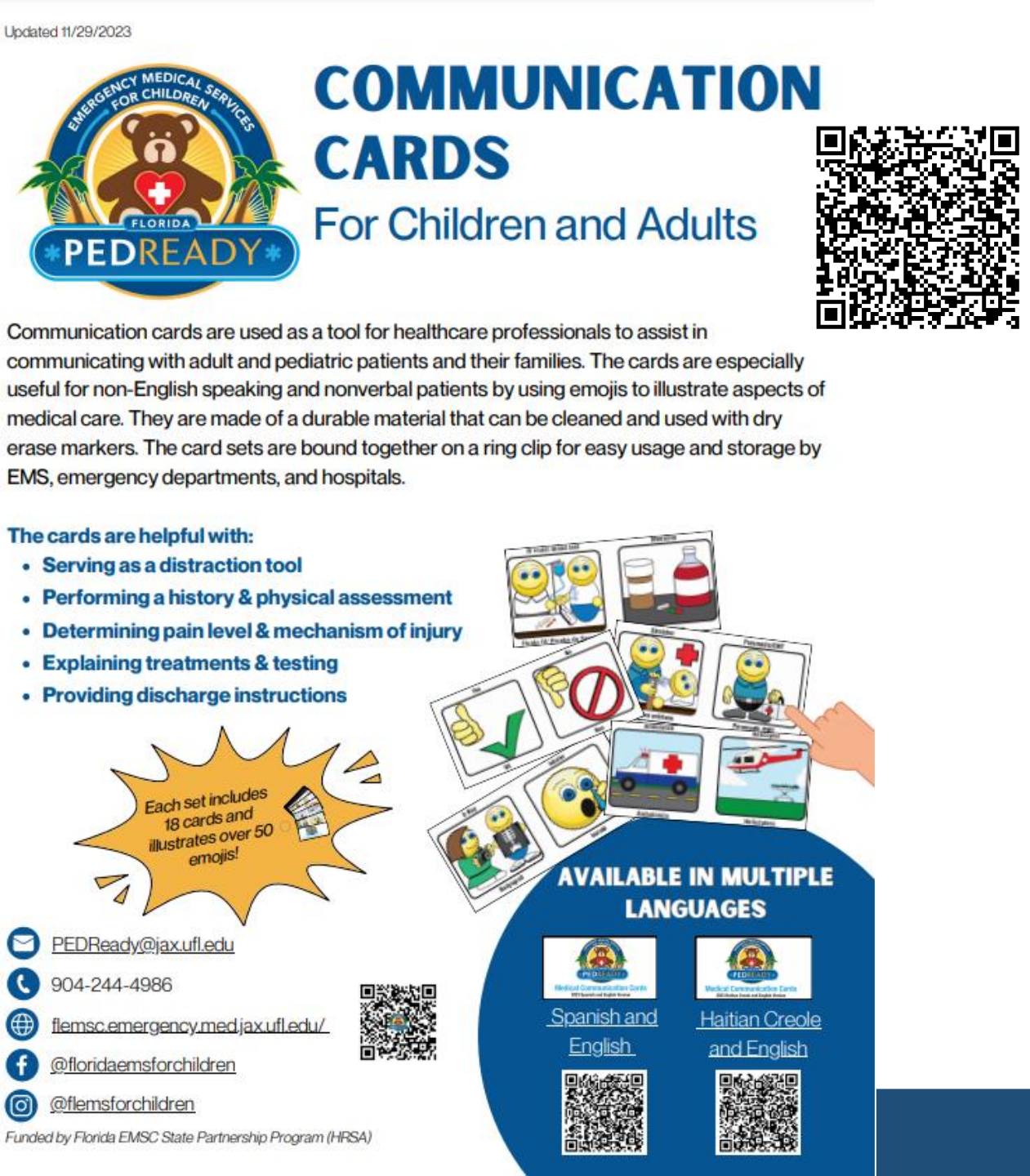
Funded by Florida EMSC State Partnership Program (HRSA)

https://flemsc.emergency.med.jax.ufl.edu/

Communication Cards

- National Project
- Spanish and English

- Haitian Creole and English



Medical ID Bracelet Brochure

IMPORTANCE

In the United States, about 20% of children have special health care needs, including chronic medical and mental health disorders.

It is important that children and their caregiver(s) have a way to express specific information about their medical needs in settings such as schools and in the event of an emergency or disaster.

CONTACT US

PEDReady@jax.ufl.edu

904-244-4986

flemsc.emergency.med.jax.ufl.edu/

@floridaemsforchildren

@flemsforchildren

EMERGENCY MEDICAL SERVICES FOR CHILDREN

FLORIDA PEDREADY

Partnering with emergency departments, emergency medical services agencies, disaster preparedness organizations, and families in the care of ill and injured children to enhance pediatric readiness across the continuum of care

Funded by Florida EMSC State Partnership Program (HRSA)

Updated 01/04/2024

FLORIDA EMERGENCY MEDICAL SERVICES FOR CHILDREN (EMSC) STATE PARTNERSHIP PROGRAM

MEDICAL ID BRACELET

To protect your child(ren) and family during the event of an emergency or disaster

PURPOSE

Medical identification (ID) jewelry, such as a bracelet, is intended for people living with health conditions, allergies, and those taking medications.

Medical ID jewelry is used to provide current medical information to people, such as health care professionals, law enforcement, or bystanders. The person wearing the bracelet may not be able to speak or communicate about their medical needs in the event of an emergency.

INFORMATION TO INCLUDE ON MEDICAL ID BRACELETS

MEDICAL INFORMATION

Medical information can include health conditions, allergies, and medications.

CONTACT INFORMATION

Contact information can include first and last name and an emergency contact, such as a caregiver (include first and last name and phone number).

Please speak with your child's doctor or team to determine what to include on their medical ID bracelet.

STICKYJ® MEDICAL

There are multiple medial alert systems and jewelry available. StickyJ® Medical sells medical ID bracelets and has graciously provided the Florida EMSC State Partnership Program a 20% discount to offer to children and their caregiver(s).

There are multiple straps to choose from including butterflies, flowers, Minecraft characters, sports, and more. Choose from pre-engraved ID tags or a custom-engraving. To learn more visit our website or scan the QR code below.

Please feel free to share this resource with your ED or agency!

StickyJ® Medical

- StickyJ® Medical sells medical ID jewelry, such as bracelets, and has graciously provided the Florida EMSC State Partnership Program a **20%** discount to offer to children and their caregiver(s) throughout 2024
- There are multiple bracelet straps to choose from including butterflies, flowers, Minecraft characters, sports, and more
- Choose from pre-engraved ID tags or a custom-engraving

Learn more

Pediatric Emergency Care Coordinators/Champions (PECCs)

Prehospital PECC Flyer

- Intended to provide an overview of the role and responsibilities of a prehospital PECC
- If you are interested in becoming a prehospital PECC or know someone who may be, email pedready@jax.ufl.edu

ED PECC Flyer

- Intended to provide an overview of the role and responsibilities of an ED PECC
- If you are interested in becoming an ED PECC or know someone who may be, email pedready@jax.ufl.edu

Florida EMSC EMS Resource Bag

- For EMS agencies completing the 2024 Prehospital Pediatric Readiness Project Assessment
- Contents estimated at a $75-100 value and include:
  - Communication cards
  - Modified JumpSTART and START badge buddy
  - PALS pocket card
  - Newborn delivery resources
  - Difficult Airway Course pocket card (adult and pediatric)
  - Pediatric ECG card
  - Pain management resources
  - Pediatape (if requested)
  - Distraction tools & more!

Example

Florida Progress on Voluntary ED and Prehospital Pediatric Readiness Recognition Programs

EMS Pediatric Readiness Workgroup Progress

- Agreed upon a Florida Prehospital PRRP with 2 tiers
  - Florida PEDReady Silver
  - Florida PEDReady Gold
- Application package in progress
- Virtual verification process TBD

Florida Prehospital Pediatric Readiness Recognition Program Logos

Florida Prehospital Pediatric Readiness Recognition Program Minimum Criteria for Silver Level of Recognition

- **Pediatric Emergency Care Coordinator/Champion**
  - Has a designated pediatric emergency care coordinator/champion (i.e., PECC)
- **Equipment and Supplies**
  - Has a defined process for prehospital practitioners to locate and physically demonstrate the correct use of pediatric specific equipment including pediatric restraint devices
  - Utilizes national consensus recommendations to guide availability of equipment and supplies for treating children of all ages (newborn to adolescent)
  - Has a weight estimation system and provides annual training on medication dosing for children
- **Disaster**
  - Participates in disaster exercises that include children
  - Has knowledge of a prehospital triage algorithm that includes children as verified by annual training

Florida Prehospital Pediatric Readiness Recognition Program Minimum Criteria for Silver Level of Recognition Continued

- **Policies, Procedures, and Protocols***
  - Includes pediatrics in policies and protocols (e.g., safe transport, recognition and reporting of child maltreatment, pediatric assessment, trauma triage, care of unaccompanied minors, and pediatric refusals) (provide 3 examples)
- **Quality Improvement**
  - Has a quality improvement plan which includes pediatric considerations (e.g., advanced procedures, cardiac arrest, respiratory arrest, and/or advanced life support)
- **Community Outreach (optional)**
  - Provide information regarding community outreach and prevention efforts related to children and families or other pediatric-related programs

*Standard Operating Procedures, Standard Operating Guidelines, Field Guide, etc.

Florida Emergency Department Pediatric Readiness Recognition Program

National Pediatric Readiness Recognition Program Collaborative

- A voluntary collaborative open to EMSC State Partnership Program Directors and Managers working toward achieving the EMSC Performance Measures requiring both ED and prehospital pediatric readiness recognition programs
- To determine *minimum* criteria for ED Pediatric Readiness Recognition Programs (PRRP) using a Delphi process
- Provides an evidence-based, consensus-driven, starting point for pediatric readiness recognition programs

EMSC Quality Improvement Collaboratives

National Pediatric Readiness Recognition Program Collaborative: ED Round 3 Voting Results

Criteria	Mean	Min	Max	Range
Pediatric Equipment and Supplies Criteria: Access to pediatric emergency equipment (crash cart/bag) in ED	4.714015152	4	5	1
PECC Specific Criteria: At Least 1 PECC	4.620265152	3	5	2
Weight in Kilograms Criteria: Weighing children in kg only	4.50094697	1	5	4
Pediatric Equipment and Supplies Criteria: All recommended equipment and supplies are readily available within the ED	4.490530303	2.75	5	2.25
Weight in kilograms criteria: Weighing and recording children in kg only	4.43844697	2	5	3
Pediatric Policies and Protocols Criteria : Include pediatrics in policies and procedures	4.424242424	2.5	5	2.5
pediatric considerations	4.4	3	5	2
Interfacility Transfer Criteria: Interfacility transfer guidelines	4.318181818	2.5	5	2.5
Pediatric Equipment and Supplies Criteria: Daily method to verify the proper location of pediatric equipment and supplies	4.305871212	2.5	5	2.5
Pediatric Policies and Protocols Criteria: Pediatric-specific triage	4.303977273	2.5	5	2.5
Pediatric Policies and Protocols Criteria: Family centered care	4.299242424	3	5	2
Pediatric Competency Evaluations Criteria: Pediatric annual training opportunities for key staff	4.261363636	2.5	5	2.5
Pediatric Competency Evaluations Criteria: Pediatric competency evaluations for nurses	4.107007576	1	5	4
Pediatric Competency Evaluations Criteria: Pediatric Competency evaluations for key staff	4.088068182	2	5	3
QI Criteria: Pediatric QI plan	4.053030303	2	5	3
Pediatric Equipment and Supplies Criteria: Require critical/commonly missing pediatric equipment items	4.052083333	2.5	5	2.5
Pediatric Policies and Protocols Criteria: Pediatric evidence-based pathways and/or decision support	4.045454545	2.5	5	2.5
Pediatric Competency Evaluations Criteria: Pediatric competency evaluations require pediatric skills practice	4.040719697	2	5	3
Pediatric Policies and Protocols Criteria: Pediatric reduced dose radiation policy	4.017992424	2	5	3
Pediatric Policies and Protocols Criteria: Pediatric Mental Health policy	4.017045455	2.5	5	2.5
QI Criteria: Pediatric QI plan that includes pediatric-specific indicators and tracking performance	3.913825758	2	5	3
Interfacility Transfer Criteria: Interfacility transfer agreements	3.663825758	1	5	4
Disaster Plan Specific Criteria: ED Disaster plan must include pediatric considerations and highlight critical domains from the EIIC's Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Policies	3.610795455	1	5	4

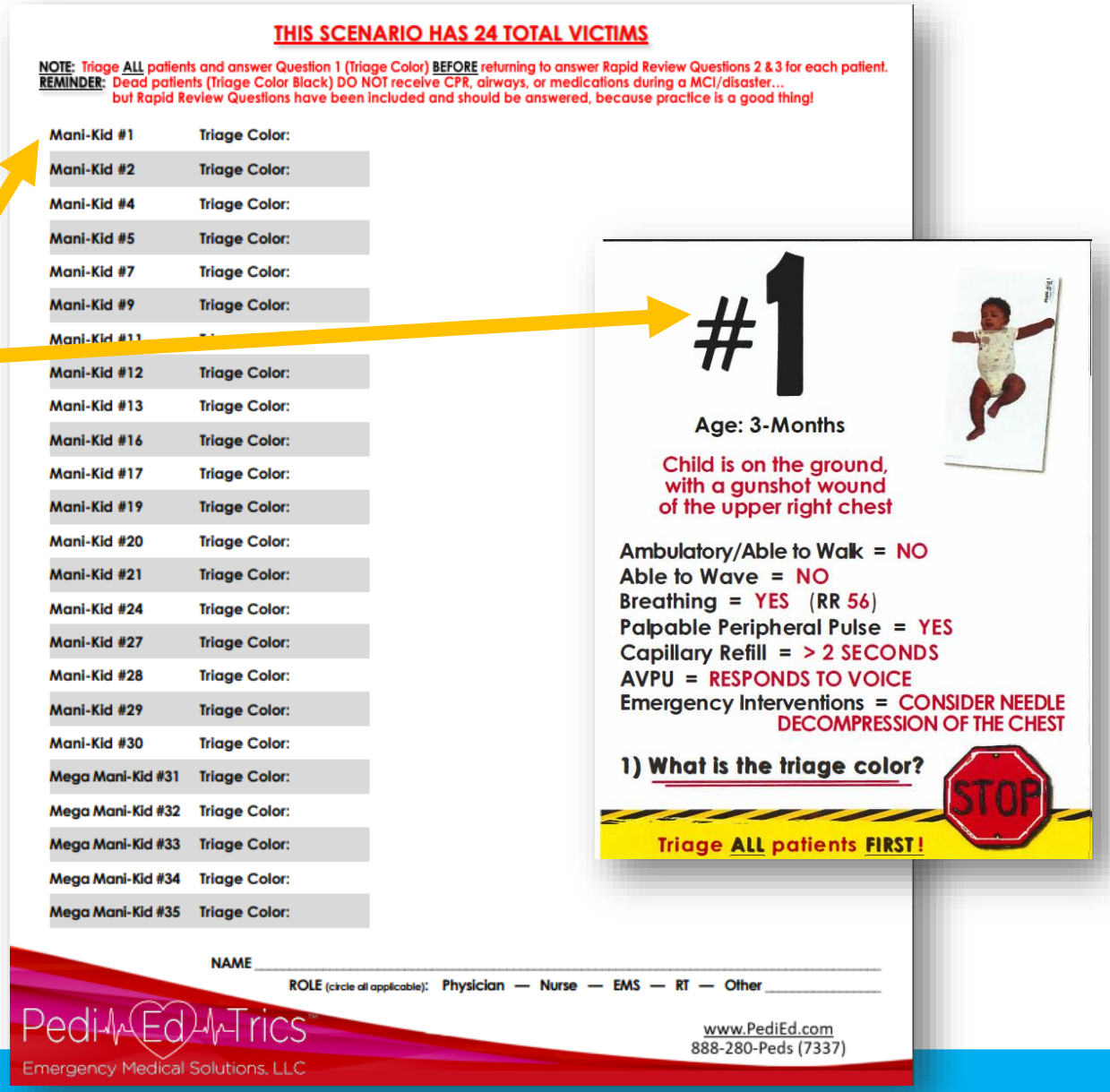
ED Minimum Criteria Being Considered

First Florida EMSC Disasters in Seconds Training

- In November 2023, Florida EMSC held their first Disasters in Seconds training
- Conference attendees participated in an Elementary/Middle School Shooting mass casualty incident (MCI) scenario involving 24 victims
- Many HCCs have purchased this training resource

Answer Forms

- On the answer form, the numbers along the side of the form = the victim number



Thank you to all of our agencies and health care coalitions working hard to make Florida PEDReady! Send in your pictures to pedready@jax.ufl.edu

What Will Your Legacy Be?
Help Me Make Florida PEDReady!

EMERGENCY MEDICAL SERVICES FOR CHILDREN
FLORIDA
PEDREADY

FLORIDA
PED
READY

Considerations

- Education, outreach, compassion, share resources, be nonterritorial- *the children and parents don't care who you work for, just take care of them*
- If you work in a large academic center, think about being in a freestanding or rural ED with one doctor, 2 nurses, over 30-45 minutes from pediatric specialty care, waiting on IF transportation
- Provide feedback and outcomes to referring EDs, EMS, flight crews, etc.

Future Challenges

- Emergency care workforce shortages and burnout
- Delays in transport to definitive care
- Overwhelming burden of EDs and EMS caring for children with mental health disorders for days while awaiting placement
- Medically complex children, autism, etc.
- Maternity care deserts, decreased prenatal care, newborn deliveries at home, in the field, in the ED
- Rising rates of abuse, violence, infant mortality

Contact Information

- Program and Medical Director: Phyllis Hendry, MD, FAAP, FACEP
  - Email: Phyllis.Hendry@jax.ufl.edu
  - Phone: 904-244-4986
- Program Manager: Katelyn Perl, MS, CHES®
  - Email: Katelyn.Perl@jax.ufl.edu
  - Phone: 904-244-8617
- Program:
  - Email: PEDReady@jax.ufl.edu
  - Phone: 904-244-4986
  - Website: flemsc.emergency.med.jax.ufl.edu/
  - Facebook: @floridaemsforchildren
  - Instagram: @flemsforchildren

Questions and Open Discussion

Thank you for making Florida PEDReady!