

The Pony Express

Improving Emergency Medical Care for Children All Across Texas

EMS for Children Mission Statement

To reduce child and youth morbidity and mortality caused by severe illness or trauma by providing the right care, at the right place, at the right time.



Happy New Year!

The end of a year and beginning of the new year is a time for reflection on the accomplishments we made in the previous year and to look forward to achieving more in the coming year.

In 2021 the Texas EMS for Children Program employed a new program manager and new program director, completed the National Pediatric Readiness Project (NPRP) Assessment, revised the Voluntary Pediatric Recognition Program (VPRP), began revision of the EMS Recognition Program, awarded Paramedic Heather Waites and EMT Ryan Wilkenfeld with the EMSC Crew of the Year Award, completed the National EMSC Survey, reengaged with several organizational partners, and revived the Pony Express Newsletter!

Some of our goals for 2022 are to complete the revision of the EMS Recognition Program, develop a Pediatric Emergency Care Coordinator (PECC) community of practice, achieve an 80% response rate on the National EMSC Survey, increase the presence of the EMSC program throughout the state, and research and begin development of alternative sustainable funding sources for the Texas State Partnership.

If you have any feedback on our newsletter, or if there are any stories you would like to see, please send them to Sam Vance, Program Manager, EMSC State Partnership, Texas at: spvance@bcm.edu

Upcoming Events

- Jan. 5 [EMSC Survey](#) begins
- Jan. 17 [Martin Luther King Jr. Day](#): EMSC Offices Closed
- Feb. 9 [EMSC Advisory Council Meeting](#): Austin, TX
- Feb. 9-11 [Governor's EMS and Trauma Advisory Council](#): Austin, TX
- Mar. 31 [EMSC Survey](#) concludes



www.bcm.edu/emsc





2022 EMS for Children Survey

The 2022 EMS for Children Survey will launch January 5, 2022! This is a national survey of EMS agencies to better understand the EMS system’s ability to care for ill or injured children, which is particularly important during the current public health crisis. We recognize this is a difficult time and appreciate your help as we seek to understand more about pediatric emergency care amidst the pandemic. In past years, the responses from you and your colleagues have helped identify needs and provide resources for improving pediatric emergency care at the local and national level. To continue building on this momentum, we are relying on administrators from all EMS agencies to respond to this questionnaire. Your responses will be used by the Texas EMSC Program for quality improvement efforts. De-identified data from agencies across the country will also be combined to review progress and provide support for integrating the needs of children into our overall emergency care systems.

If you have any questions about the survey, please contact Texas EMS for Children Program Manager, Sam Vance: spvance@bcm.edu or 832-824-EMSC (3672).

Jan-Mar 2022

EMS FOR CHILDREN SURVEY



Your invitation is coming soon by email!

2022 EMS for Children Crew of the Year Nominations Underway

National EMS Week 2022 is May 15 thru May 21, and Wednesday, May 18, is set-aside for National Emergency Medical Services for Children Day. National EMS Week is an annual celebration of the dedication and commitment of EMS providers all over the country making differences in the lives of millions of Americans every day. It also provides us with an opportunity to bring together EMS agencies and their local communities to focus attention on illness and injury prevention and raise awareness about issues important to the continued development and improvement of EMS and Trauma systems.

National EMS for Children Day places a spotlight on the delivery of high-quality emergency medical care for children, focusing on the unique needs of critically ill or injured pediatric patients and the challenges faced by EMS professionals in meeting those needs. Hundreds of communities around the nation are planning special events to honor the men and women who provide emergency care to our children and to raise awareness about safety and prevention and the ongoing need to improve and expand specialized care for children in the prehospital setting.

In honor of EMS for Children Day 2022, the Texas EMS for Children State Partnership is now accepting nominations for the 13th annual EMS for Children Crew of the Year Award. This award is granted to an EMS crew or station who has displayed outstanding care for a child in an emergency medical or trauma event,

demonstrated exceptional effort in the development of pediatric training or quality improvement programs or was instrumental in planning and conducting creative injury prevention programs.

The awards will be presented to the winning nomination during a ceremony on the National Emergency Medical Services for Children Day on May 18, 2022. Recipients will receive, individual certificates of appreciation, and a plaque for their station or crew quarters recognizing them as champions in the emergency care for children in Texas.

Thank you for helping us recognize the men and women who go above and beyond to serve the children in our communities.

For more information on how to submit a nomination for the EMS for Children Crew of the Year, [Click Here](#).



Pictured: 2021 EMS for Children Crew of the Year Award recipients Heather Waites and Ryan Wilkenfeld of Acadian Ambulance. Others pictured are Brandon Hebert, Eddie Burleigh, and Emily Kidd, MD

Pediatric Readiness in Texas; It's Coming

By Sally Snow and Sam Vance. Portions adopted from the EMSC Innovation and Improvement Center

DSHS has proposed changes in the trauma rules to include a component of Pediatric Readiness (Peds Ready). The American College of Surgeons - Committee on Trauma (ACS-COT) is also incorporating Peds Ready in its new addition of *Resources for Optimal Care of the Injured Patient* scheduled for publication in March 2022. What does that mean for Texas Trauma Centers?

In 2013, 305 of 504 hospitals in Texas participated in the National Pediatric Readiness Project (NPRP) assessment. These 305 hospitals cumulatively treat 1,572,835 children annually in their emergency departments (EDs). The majority were treated in general ED's in community hospitals. The average score of Texas hospitals on this assessment was 71 on a scale of 0 – 100, demonstrating that many hospitals lacked the nationally recommended pediatric readiness core elements, including staff education, equipment and pediatric specific policies and procedures.¹

Studies have shown, in the absence of pediatric specific verification programs like the Texas EMSC Voluntary Pediatric Recognition Program (VPRP), designated trauma centers are **no more likely** to achieve high pediatric readiness scores than non-designated facilities. Unintentional injury remains the most common cause of ED visits and death for children over one year of age in the U.S. While the development of trauma centers has resulted in improved outcomes overall, the adoption of pediatric specific elements by pediatric trauma centers have resulted in even greater decreases in morbidity and mortality for injured children. This is likely related to increased adherence to pediatric-specific needs (i.e., pediatric readiness) and alludes to the potential impact of pediatric readiness on healthcare outcomes. Indeed, pediatric readiness is associated with a 4-fold decrease in mortality for critically ill children.²

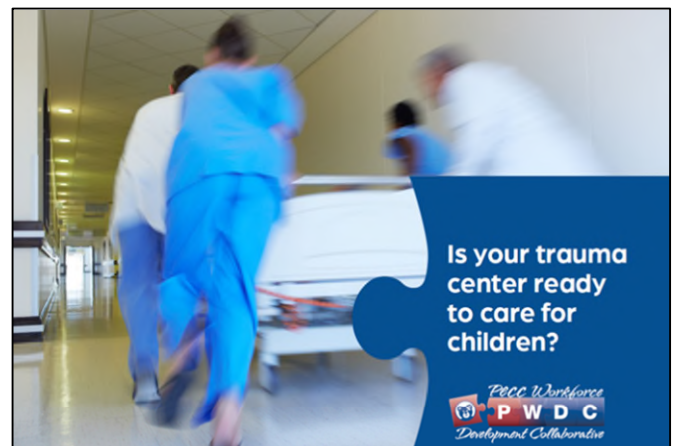
While trauma verification requirements have led to higher standards of care, the American College of Surgeons - Committee on Trauma (ACS-COT), recognizing gaps in the care of injured children, announced new pediatric standards for all verified trauma centers, including a standard based on the National Pediatric Readiness Project.

To help trauma centers prepare for the new standard, the EMS for Children Innovation and Improvement Center (EIIC) is holding a Trauma Improvement Sprint during two half-day sessions on February 23, 2022, and March 2, 2022, as part of its [Pediatric Emergency Care Coordinator \(PECC\) Workforce Development Collaborative](#). A PECC can be any physician, nurse, or clinical team member; previous pediatric experience is not required.

Register for the Trauma Improvement Sprint [here](#). Learn more about pediatric readiness and access related resources and tools [here](#).

References

1. Vance, SP, Macias, CG, Shah, MI, Snow, SK, Sosebee, J, Remick, K. *Voluntary Pediatric Facility Recognition in Texas*. Houston, TX: Baylor College of Medicine. (April 2014).
2. Remick K, Gaines B, Ely M, Richards R, Fendya D, Edgerton EA. Pediatric emergency department readiness among US trauma hospitals. *J Trauma Acute Care Surg*. 2019 May;86(5):803-809. doi: 10.1097/TA.0000000000002172. PMID: 30601455.



Is your trauma center ready to care for children?

PECC Workforce
P W D C
Development Collaborative

Ensuring Pediatric Defibrillator Pad Compatibility to Provide Appropriate Care

During the December 2021 meeting of the Pediatric Emergency Care Council of the National Association of State EMS Officials (NASEMSO), some concerning issues regarding pediatric defibrillator pad incompatibility was identified by at least two states. The issue is that defibrillator pads are not being used in accordance with manufacturers recommendations by their EMS providers for pediatric patients. Using pads that are not in accordance with manufacturers recommendations results in the inability to provide appropriate care to pediatric patients when needed.

In some EMS agencies, the agency or their personnel are placing Zoll Pedi-padz in the Zoll AED Plus units (Automated External Defibrillators). While these pads are manufactured by Zoll, they are not compatible with the Zoll AED Plus units and will not plug into the unit. The pediatric pads required for the Zoll AED Plus units are the Pedi-padz II. One reason identified as to why this may be happening is that the stock for BLS and ALS defibrillators are in the same area, with personnel seeing the word "Pedi" and grabbing the wrong pads. Additionally, at least one AED was found to have pediatric pads with packaging that had red writing and a circle with a line through it around an AED symbol stating, "Not for AED use."

Another issue identified is some EMS agencies with the Physio-Control Lifepak 15 monitor/defibrillator are using non-manufacturer recommended defibrillator pads.

The non-manufacturer pads may have therapy limitations for both age and weight ranges for infants and children in both the manual and AED mode.



Regardless of pad type, the Lifepak 15 operator's manual, in section 5, under "Automated External Defibrillation (AED), Intended Use" states: "In AED mode, the Lifepak 15 monitor/defibrillator is not intended for use on pediatric patients less than eight years old."

The EMS for Children State Partnership, Texas would like to remind all our EMS providers, first responder organizations, and personnel to verify all monitor/defibrillators and AEDs have the correct manufacturer recommended pads stocked in all units to ensure that pediatric patients always receive appropriate, pediatric specific energy levels.



Texas EMSC and the Family Advisory Network: A Survey Regarding Children with Special Health Care Needs

By Annabel Cramer M.D. and Greta James-Maxfield

In 1993 and 2007, the Institute of Medicine along with the Board on Health Care Services and the Committee on the Future of Emergency Care in the United States Health System created a comprehensive overview of emergency medical services for children (EMSC).^{1,2} It was noted in their report that, in 2002, there were approximately 29 million pediatric ED visits for children under the age of 15, representing nearly 27 percent of all ED visits.³ The majority of those pediatric ED visits (92 percent) are to non-children's hospitals which, on average, see less than 10 pediatric patients per day. Therefore, most emergency department providers have limited ongoing experience with critically ill and injured children, which is easily exacerbated by the framework of a busy and overcrowded emergency department as was seen during the COVID-19 global pandemic.

Among children who can become ill and injured, children with special health care needs are the most vulnerable and most rapidly growing subset of pediatric patients.⁴ They are also heavy consumers of health care services.^{1,2} While emergency care providers are increasingly likely to encounter such children, providers often feel uncertain about their ability to meet these patient's needs.^{1,2} Although there are several national initiatives to ensure that these patients receive comprehensive, equitable, family-centered and compassionate care, one in particular is the Family Advisory Network (FAN) within the EMSC program.^{1,2} The FAN allows family representatives to contribute in state-wide programs through their involvement in policy development and implementation, serving as members of their EMSC advisory committee, and helping to plan, present, and

promote educational offerings within their state.

Within Texas, the state EMSC program and their FAN have a shared mission to quantify and summarize the needs of children and adults with special health care needs and their caretakers. In 2020, the FAN conducted a Texas Parent to Parent Family Support Survey. The goal of this survey was to quantify the need for EMS services as well as comprehensive and efficient emergency department care. Due to COVID-19 restrictions, the survey was administered through phone interviews. The survey had a total of 16 questions, and there were 54 respondents.

Based on the survey results, the age of individuals being cared for with special health care needs ranged from 3 to 39 years old. The wide range of ages highlights the significant responsibility and extensive commitment taken on by family/caretakers of patients with special needs. Furthermore, the survey showed that most families have had to use EMS services at least 1-3 times over the last year, if not more. While not addressed in this survey, one FAN representative commented that several factors may impact a caretaker's decision to contact EMS including socioeconomic status, lack of familial support or respite, medication/treatment schedules, and multi-generational households or additional children with unique or conflicting needs.

Additionally, the survey showed that children with special healthcare needs, either due to their presenting complaint, underlying medical condition, or their dependence on medical equipment, have a higher chance of being admitted to the hospital. (Continued on next page)



Texas Parent to Parent

Respondents also detailed that many hospitals were able to care for their child, although there were a few instances during which some of the patients were transferred to other hospitals for a higher level of care.

Personal attestations were also taken from the respondents. Several suggested that the care their child received was best when parents/caretakers were acknowledged for the deep understanding of their child's medical condition and were involved in the medical decision making. Others commented that they were appreciative when medical providers were familiar with their child's underlying condition and were both efficient and comprehensive with their care.

Further comments from respondents emphasized the potential causes of suboptimal medical care for children with special health care needs which included lack of familiarity with rare or complex medical problems, misinterpretations of behavioral cues from patients with autism spectrum disorder or developmental delay, unknown baseline status of the patient, and technology dependent children.⁴

References

1. Institute of Medicine. 2007. Emergency Care for Children: Growing Pains. Washington, DC: The National Academies Press. <https://doi.org/10.17226/11655>.
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3. Kelly D. Young, Marianne Gausche-Hill, Christian D. McClung, Roger J. Lewis; A Prospective, Population-Based Study of the Epidemiology and Outcome of Out-of-Hospital Pediatric Cardiopulmonary Arrest. *Pediatrics* July 2004; 114 (1): 157-164. [10.1542/peds.114.1.157](https://doi.org/10.1542/peds.114.1.157)
4. Alfred Sacchetti; Christina Sacchetti; Carol Carraccio; Mike Gerardi (2000). The Potential for Errors in Children with Special Health Care Needs. , 7(11), 1330-1333. [doi:10.1111/j.1553-2712.2000.tb00484.x](https://doi.org/10.1111/j.1553-2712.2000.tb00484.x)

2021 National EMS Education Standards Released

The newly updated National EMS Education Standards are now available. This marks the first major revision of the standards since they were originally published in 2009. The revised standards outline minimum competencies for entry-level EMS clinicians to perform their roles.

One of the major revisions is to include pediatrics throughout the entire standards, rather than simply in one section. It was determined that for too long information on pediatrics has been limited to a short section of the course, perhaps a chapter or a couple of lectures. Pediatrics was treated as a special population that was different from what clinicians see every day. The new approach no longer treats pediatrics as a special population and includes information and training on pediatrics throughout the course, integrating it in the entirety of the curriculum, while also highlighting the important aspects of how caring for children may or may not differ from caring for adults.

