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.



Celebrate Spring!

Spring brings us National EMS Week and EMS for Children Day, which is a time to celebrate all our EMS professionals and the work you do every day. It's also time to recognize our EMSC Crew of the Year. You'll find more information about EMS Week/EMSC Day and nomination information for EMSC Crew of the Year in this edition.

You'll also read about the amazing work former Texas EMSC Program Director, Manish Shah, MD, MS is doing to treat seizures



in pediatric patients in the prehospital environment.

Don't miss our presentation, "Pediatric Readiness for Hospitals and EMS: Impacting Border Health with Pediatric Emergency Care Coordinators." This is a collaborative effort with our colleagues in New Mexico.

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

Upcoming Events

April 12	Impacting Border Health with Pediatric Emergency Care Coordinators (PECC)
May 15-21	EMS Week
May 18	<u>National EMS for</u> <u>Children Day</u>
May 18	EMSC Crew of the Year Award Presentation
May 24-26	<u>Governor's EMS and Trauma</u> <u>Advisory Council (GETAC)</u> <u>Meetings</u> , Austin, TX
May 24	<u>Texas EMSC Advisory</u> <u>Committee Meeting,</u> Austin, TX
Jun. 19-23	<u>NASEMSO Annual Meeting</u> , Charleston, SC



2022 National EMS Week is May 15 - 21

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.

Theme Days for 2022

- Monday: Education
- **Tuesday**: Safety Tuesday
- Wednesday: EMS for Children Day
- Thursday: Save-a-Life (CPR and Stop the Bleed Challenge) "National Stop the Bleed"
- Friday: EMS Recognition Day



2022 EMS for Children Crew of the Year Nominations Underway

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.

To submit a nomination for the EMS for Children (EMSC) Crew of the Year Award, please complete the online nomination by the end of business **April 15, 2022.**

The winner will be notified by April 25, 2022, and will be publicly listed on the Texas EMSC website: www.bcm.edu/emsc

If you have any questions, please contact Program Manager, Sam Vance at 832-824-EMSC(3672) or <u>spvance@bcm.edu</u>



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

To submit a nomination <u>Click Here</u>.

Or scan the QR Code below.



Pediatric Dose Optimization for Seizures in Emergency Medical Services (PediDOSE)

By Manish Shah, MD, MS

Seizures are one of the most common reasons people call 9-1-1 for children. Seizures that do not stop on theirown can be life-threatening. Paramedics are Emergency Medical Services (EMS) clinicians who are trained to treat seizures with a benzodiazepine medication called midazolam. Midazolam is a proven treatment paramedics already use to stop a seizure quickly, but delays in administering midazolam occur when paramedics must perform multi-step calculations to determine the dose or try to insert an intravenous line in a child. Unfortunately, these delays mean that approximately half of children receive the wrong dose, usuallyan underdose. Delayed and underdosed medication result in 1/3 of these children arriving via ambulance to the emergency department (ED) still seizing. The Pediatric Dose Optimization for Seizures in EMS (PediDOSE) trial evaluates whether an agebased, calculation-free method of quickly giving the right midazolam dose improves outcomes in children. Dr. Manish Shah is the Principal Investigator for PediDOSE, and the study aims to decrease the number of children arriving at the ED with an ongoing seizure while maintaining patient safety.

EMS agencies participating in this study will replace conventional methods for calculating the midazolam dosewith a new standardized treatment plan. Researchers will collect information about children ages 6 months to 13 years transported by participating EMS agencies to an emergency department for active seizures. It is exciting that Dallas Fire and Rescue and Houston Fire Department EMS are part of the 20 locations across the country that will enroll patients over a four-year period. Over the course of the study, the participating EMS agencies will be randomly assigned a timeline for adopting the standardized treatment plan. This will allow researchers to compare the new standardized treatment plan to current methods and ensure safe implementation of the new standardized protocol.

A child experiencing an ongoing seizure is having a life-threatening emergency. These situations can be stressful for parents and require a paramedic's complete focus. Therefore, it will not be possible to obtain permission from parents to have their child enrolled in the study before treatment is given.

(See "PediDOSE" on last page)



ED Pediatric Readiness Key to Children's Survival One Year Out from Injury

From the EMSC Innovation and Improvement Center (EIIC)

A new study has found that injured children have a 30 percent lower mortality risk out to one year after receiving initial care at EDs with pediatric readiness. The study, led by Principal Investigator Craig D. Newgard, MD, MPH, of Oregon Health and Science University, is based on data from the 2013 National Pediatric Readiness Project (NPRP) Assessment. The NPRP is a multiphase quality improvement initiative of the EMSC in partnership with the American College of Emergency Physicians, the Emergency Nurses Association, and the American Academy of Pediatrics.

The study, published Feb. 2 in *JAMA Surgery*, analyzed outcomes for 88,071 injured children cared for in 146 EDs of trauma centers in 15 states. The decreased risk was specifically associated with EDs in the top 25 percent of pediatric readiness nationwide, as defined by their readiness score, which is determined on a scale of 0-100 (lowest to highest readiness) by the NPRP assessment. The median score of EDs in the study was 88.

This is the first study to examine pediatric readiness and survival to out to one year; Newgard and his colleagues published a paper last year in *JAMA Pediatrics* that linked inhospital survival with high pediatric readiness.

The new research comes just a few months after the American College of Surgery announced new pediatric standards for all verified trauma centers, including a standard that will require trauma centers to complete the NPRP assessment and identify a plan to address any gaps. "Having the assessment woven into that process is a big win for pediatric readiness and it's a big win for injured kids," says Newgard.

Newgard and his team have forthcoming papers that will delve further into pediatric readiness among U.S. trauma centers. One will examine the highest impact areas of pediatric readiness (there are approximately 80 total).

"We'd like to come up with a rank order to help people decide: if you want to move the needle and you don't have unlimited resources, which readiness factors really drive pediatric survival? For example, if you're a hospital administrator or ED manager funding – say \$50,000- was allocated to improving pediatric readiness in your ED, how would you prioritize spending it?"

He and other researchers in the pediatric emergency space also eagerly anticipate the results of the 2021 NPRP assessment, which are expected to be published in the late spring or early summer.

"We're looking not just in terms of how has readiness shifted from 2013 to 2021, but really, what has been the impact on children and lives saved?" says Newgard. "Can we quantify that o when we put forth a national policy and national quality improvement program to raise the level of readiness among all hospitals, what is the impact? ...Another piece of that project is if we expect the level of readiness will have improved a certain amount, is there a way we could make it even better?"

Newgard points to intentional hospital selection by EMS crews or by parents as areas for further investigation.

"Pediatric readiness is not simply completing a one-time checklist or assessment," says Kate Remick, MD, Co-Director of the EIIC and NPRP. "It requires continuous quality improvement, and it's an ever-evolving area of research – as Dr. Newgard's work reflects. We are grateful to him and all the researchers working to shed light on the impact of pediatric readiness and how we can keep moving the needle for ill and injured children."



Pediatric Preparedness for Hospitals and EMS: Impacting Border Health with Pediatric Emergency Care Coordinators

Presented by the New Mexico and Texas EMS for Children (EMSC) State Partnerships

Date: April 12, 2022 Location: Virtual Time: 12 p.m. – 4 p.m. MDT/1 p.m. – 5 p.m. CDT

The US continues to see large numbers of asylum seekers at our borders. Many are families with young children and many children are arriving without families.

On April 12th, 2022, please join us to explore this topic and learn valuable practices to prepare local hospitals and EMS providers to deal with unexpected pediatric patients.

AGENDA

- Introduction to the EMSC Program
- Healthcare Needs for Unaccompanied Migrant Children at the US Border
- The Importance of Pediatric Emergency Care Coordinators (PECCs)

Break, followed by breakout sessions

- Hospital based PECCs
- EMS Based PECCs
- EMSC Innovation and Improvement Center (EIIC) Toolkits for PECCs and Pediatric Readiness







2022 EMS for Children Survey

The 2022 EMS for Children Survey closes March 31, 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.

To access the survey visit: <u>https://www.emscsurveys.org/</u>

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).

Pediatric Dose Optimization for Seizures in Emergency Medical Services (PediDOSE)

This means that eligible children will be enrolled under an exception from informed consent (EFIC) process that follows federalrules for emergency research, has been approved by a research ethics review board, and has been used for other EMS-based studies in both children and adults. Parents or guardians of children enrolled in this study will be notified about their children's participation after enrollment.

We invite you to learn more about the study by visiting our website <u>https://www.texaschildrens.org/pedidose-study</u>, where you can read about the study procedures and provide your feedback about EFIC and the PediDOSE study.

