EMSC Connects

VOLUME 7, ISSUE 2 March-April 2018

Emergency Medical Services for Children
Utah Bureau of EMS and Preparedness

A Word From Our Program Manager

Well, we finally had a little bit of winter arrive and the snow is high in some areas and cold temperatures have returned. I had some crocus and miniature irises coming up in my garden because of the warm weather in January and February. But they are buried under a foot of snow. At least spring and daylight savings are just around the corner and warm temperatures will return.

As I mentioned before, the EMSC grant was submitted in December and we are waiting to hear if we will be funded for the next four years. We are hopeful but it all depends on what is going on at the national level with the President and Congress. We have new performance measures we will be working on and I want to highlight one of them each newsletter.

The first performance measure is: By 2021, increase to 80 percent the proportion of EMS agencies that collect and submit uniform data to the National EMS Information System (NEMSIS). This is the “national system that collects data from pre-hospital EMS providers which are used to monitor patient care in a systematic way to improve pediatric performance and outcomes.” Fortunately, Utah is at about 95 percent compliance with a few agencies trying to transition from the POLARIS system to the Image Trend system. We should be at 100 percent within a year which is our goal for the EMSC program.

Our EMS bureau data manager will keep us informed about the status of the agencies. The prehospital data is a key factor in our efforts to conduct performance improvement on pediatric care in our state. When we link prehospital data to hospital data, we are able to look at the continuum of care as well as the outcomes. It is our goal to develop infrastructure at the regional and local levels to conduct PI and to provide reports and data to our hospitals and EMS agencies on the care that is being provided and where there are opportunities for improvement.

Each newsletter we will be providing a report from the patient care data we receive from you to provide information on the status of our pediatric care and issues in Utah. We hope you find it interesting. If you have any areas that you would like to see addressed, please contact me and we can check into it for you. As always, thank you for your continued support and in taking care of Utah’s children.

Jolene Whitney
jrwhitney@utah.gov

To submit or subscribe to this newsletter
Email: Tdickson@utah.gov

Special points of interest:

- Pediatric education in Utah
- PEPP/PALS/Or equivalent
- EMSC coordinators
- Online pediatric education
- PETOS
- Pediatric Toolboxes

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Pedi Points

Certifications are coming due, many are scrambling to tie up loose ends and find those missing CMEs. Where can I get a PEPP or PALS class? What is an equivalent? Currently every EMTI, IA and Paramedic must have current PALS/PEPP or equivalent during the time of recertification. EMSC is dedicated to helping you meet this requirement and access up-to-date, evidence based pediatric education throughout the year. This newsletter will highlight some of the great pediatric educational offerings available all over the state. Many are good for free CME. Get to know your local pediatric experts, the EMSC County Coordinators. They have a direct line to PALS/PEPP classes and can help bring a class to your region. EMSC is also excited to introduce the Pediatric Toolbox, pediatric training nights “in the can” that are sim based and qualify for 2 pediatric CMEs per student.

Why are we pushing pediatric education?

In 2017 only 7.6% of your overall patient encounters were with those under the age of 18 years. It is no wonder that pediatric calls can make EMS sweat. There are few chances to become comfortable with that population in your day to day operation. How do you become expert in something you rarely see? You must spend time and effort in maintaining your pediatric continuing education. Most EMTs will tell you that they are very comfortable with the adult chest pain, airway, and even IV starts or intubation. That is your bread and butter. Good pediatric care is not something you are going to learn on the job. Education in the absence of exposure leads to expertise.

What is PALS/PEPP or equivalent?

Pediatric Advanced Life Support (PALS)
Developed by the American Heart Association (AHA)
A classroom, video-based, instructor-led course. The goal of the PALS Course is to improve the quality of care provided to seriously ill or injured children, resulting in improved outcomes.

Pediatric Education for Prehospital Professionals (PEPP)
Developed by the American Academy of Pediatrics (AAP)
A complete source of prehospital medical information for the emergency care of infants and children. Curriculum is designed to teach prehospital professionals how to better assess and manage ill or injured children. Case-based lectures, live-action video, hands-on skills stations, and small group scenarios.

“Or Equivalent”
Developed in house
Your training officer or agency can develop education equivalent to the PALS or PEPP courses and seek approval from the Bureau of Emergency Medical Services to use in their place.

The Bureau and EMSC do not endorse any one class over another. However, EMSC has tried to find ways to help you comply with this rule. We can bring PALS classes to your agency but our most cost effective option is PEPP. Andy Ostler, our Lead Course Coordinator will be extending his work with us until April and he is your contact for more information on setting up these classes.

Andy Ostler, EMSC Lead Course Coordinator
Aostler@utah.gov
(801)597-7098
Did you Know?

You have local EMSC representation
EMSC maintains a team of coordinators who receive monthly and yearly training on pediatric concepts. They have access to state resources as well as CME training. More importantly, they live and work among you. We aim for 2 representatives per county and these folks are ready to hook you up with pediatric education and opportunities. Contact them via email.

Current Needs
If you live or work in any of the counties that do not have 2 coordinators we'd love you to join our team.

Requirements…

- Currently work for a Utah EMS agency/hospital as an EMT, Paramedic, RN, NP, MD, or approved by Utah EMSC.
- Current Bureau of EMS Instructor status, and/or approved by Utah EMSC.
- Current PEPP/PALS Provider. (Which we can help you get)


Not only can these people link you to pediatric education and specialists but in the near future each agency will need to have a pediatric emergency care coordinator (PECC). Agencies that know their EMSC Coordinators can use them in this capacity.

Emergency Medical Services for Children
It is not hard to find free pediatric CMEs in the state

Free Online Education

**PCH Patient Education Services (PES) and the University of Utah provide monthly rounds.**

**Pediatric Grand Rounds (PGR)** are education offerings webcast weekly (Sept-May) on Thursday mornings 0800-0900. They are held at Primary Children’s Hospital and you can attend in person or join the webcast from your home. The weekly lecture series covers cutting-edge research and practical clinical applications, for hospital and community-based professionals who provide care for children of any age. Some are more hospital based than others but they all count for **CME** credit when watching live. Archived presentations are also available and can serve as the base of your own CME development. Visit [http://intermountainhealthcare.org/hospitals/primarychildrens/forphysicians/pediatricrounds/Pages/PediatricGrandRoundsPresentations.aspx](http://intermountainhealthcare.org/hospitals/primarychildrens/forphysicians/pediatricrounds/Pages/PediatricGrandRoundsPresentations.aspx)

**EMS Grand Rounds (EGR)** Sponsored by University of Utah Health Care and Salt Lake City Fire/Rescue, this is offered every other month, it is geared towards EMS providers in Utah, Wyoming, Idaho, Montana, Colorado and Alaska. Times and dates vary and will be announced two months in advance. Live viewings qualify for **CME** credit.

There are 2 ways to watch

1. Live real time viewing via the internet at: [www.emsgrandrounds.com](http://www.emsgrandrounds.com) If you would like to receive CME for viewing this presentation live, email Zach Robinson (Zachary.robinson@hsc.utah.edu)

2. Delayed viewing at your personal convenience, a week after the presentation at: [www.emsgroundrounds.com](http://www.emsgroundrounds.com)

Want some face time?

**The Pediatric Emergency and Trauma Outreach Series (PETOS)** are pediatric lectures for EMS. They offer face time with PCH Physicians. These lectures are monthly on the 1st Thursday from 3-4p. To be held at the Salt Lake Public Safety Bldg 475S 300E SLC Ut 84111

You can attend live or watch the webinar. It will qualify for pediatric CME.

Access at [https://intermountainhealthcare.org/locations/primary-childrens-hospital/classes-events/petos/](https://intermountainhealthcare.org/locations/primary-childrens-hospital/classes-events/petos/)

**March**

1. **Cardiac Arrhythmias and Other Pediatric Cardiac Emergencies** with Dr. Matt Steimle

2. **Head Injury** Dr. Howard Kadish
Introducing...

EMS training officers there is new tool (in fact a whole toolbox) for conducting pediatric themed training nights. EMSC has created a toolbox or lesson plan that when followed as outlined will award 2 pediatric CMEs to each participant. We will be rolling out all the details at the 2018-2020 EMS Training Officer Instructor Conferences. Currently 3 toolboxes have been developed; pediatric airway, seizure, and sepsis. We look forward to rolling these out please contact Tia Dickson tdickson@utah.gov with questions.

Zero Fatalities 2018

We would like to invite you to the Zero Fatalities Safety Summit scheduled for Wednesday and Thursday, April 11th and 12th at the Utah Valley Convention Center. The Zero Fatalities Safety Summit is an opportunity for safety officials and advocates to share experiences, opportunities and successes in improving safety in our communities. The Summit is designed to foster discussion and interaction between presenters and participants on a variety of topics, including the state’s strategic highway safety plan, crash data usage, safety education programs, impaired driving, teen driving, engineering, safety restraint systems and enforcement opportunities, among others. Together, we can reach Zero Fatalities on our roads.

EMSC Coordinators: we have secured free registration for 10 EMSC Coordinators. For those traveling over 100 miles, we can pay for two nights lodging as well. Please contact Allan for the registration code. Aliu@utah.gov

Pharmacy Facts

Greg Nelsen PharmD, Bureau of EMS Pediatric Disaster Strike Team

Another great tool that should be accessible during all pediatric calls is a way to estimate the weight of the pediatric patient. The most popular of these tools is the Broslow Tape (I don’t recommend one brand over any other). From that estimated weight, medication doses can then be calculated. Here in the PCH ER, we use reference sheets that list all the medications that you have a high likelihood of using. It references medication concentration, dose (mcg or mg), total dose (mg or mcg/kg) and medication dose volume (mL) for the respective weight.

The reference sheets can either be by kg or color of the Broslow tape, there are also apps that mirror these reference sheets. They allow you to calculate doses on tablet computers or smart phones. The advantage of reference sheets is that in high pressure situations, the potential error of calculation errors is minimized. If you do not have these reference sheets, here are few basic equations that are can be memorized or made into a worksheet.

\[
\text{Stated weight} = \frac{\text{lb}}{2.2} = \frac{\text{kg}}{} \quad (\text{most stated weights are not very accurate, I recommend using a standard way to estimate or measure weights})
\]

\[
\text{Dose calculation} = \frac{\text{kg x (mg or mcg)/kg}}{} = \frac{\text{mg or mcg}}{}
\]

\[
\text{Medication volume} = \frac{\text{(mg or mcg) / (mg or mcg)/mL = mL}}{}
\]

If any agency would like assistance in creating reference sheets, please let me know. I believe that they are invaluable to assist in the safe dosing of medications in pediatric patients. Gregory.Nelsen@imail.org
March 2018

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March 1 Cardiac Arrhythmias and Other Pediatric Cardiac Emergencies with Dr. Matt Steimle

Apr 5 Head Injury Dr. Howard Kadish

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Project ECHO Burn and Soft Tissue Injury (ECHO) has a pediatric and adult component. CME/CEU and MD CME available https://crisisstandardsofcare.utah.edu click request access and follow instructions.

Upcoming Peds Classes, 2017

For PEPP and PALS classes throughout the state contact Andy Ostler Aostler@utah.gov

For PALS and ENPC classes in Filmore, Delta and MVH contact Kris Shields at shields57@gmail.com

Save the Date

April 11-12 Zero Fatalities Safety Summit
April 28 Northern Utah Trauma Conference (NUTS)
The Emergency Medical Services for Children (EMSC) Program aims to ensure that emergency medical care for the ill and injured child or adolescent is well integrated into an emergency medical service system. We work to ensure that the system is backed by optimal resources and that the entire spectrum of emergency services (prevention, acute care, and rehabilitation) is provided to children and adolescents, no matter where they live, attend school or travel.

Save the Date

Come experience the difference at the Western Pediatric Trauma Conference! Get all the details at www.pedtrauma.org

Primary Children’s Hospital, Phoenix Children’s Hospital, Children’s Hospital Colorado, Children’s Hospital Los Angeles, Stanford Children’s Health, Children’s Hospital of Orange County, Children’s Minnesota, and University Hospital San Antonio organized to bring you Western Pediatric Trauma Conference. We are celebrating our sixth annual event in 2018.

This activity features nationally renowned faculty in the fields of pediatric trauma, pediatric surgical subspecialties, critical care, emergency medicine and pre-hospital care. Learn and collaborate with top pediatric hospitals in the nation on innovative research and best practice methods for treating pediatric trauma patients. Enjoy activity highlights such as point counter-point sessions, research and best practice abstract sessions, and interesting case studies.