

The Pony Express

Improving emergency medical care for children all across Texas



Volume 7, Issue 1 March/April 2015



Welcome to the first edition of the Pony Express Newsletter for 2015. Last year proved to be a very busy year for us at the EMS for Children State Partnership, Texas and this year looks to be just as busy.

We are gearing up for <u>EMS Week and EMS for</u> <u>Children Day</u>. In preparation, we are working in conjunction with <u>Regional Advisory Council A – the</u> <u>Panhandle RAC</u>, to provide a one-day pediatric conference on May 20th, which happens to be EMS for Children Day 2015. Also, we are currently accepting nominations for EMS for Children Crew of the Year Award. This award is presented every year during EMS Week and is an amazing event honoring the recipients and their communities.

It is my pleasure to introduce the <u>Pediatric EMS</u> <u>Recognition Program</u>. This is a new voluntary statewide initiative that is being sponsored by the EMS for Children State Partnership to recognize EMS agencies that wish to establish programs and standards to improve their capabilities to deliver care to pediatric patients. We anticipate beginning this program in late spring or early summer.

Another statewide initiative we are currently working on is the <u>Pediatric Facility Recognition</u> <u>Program</u>. Similar to trauma center designation, pediatric facility recognition aids EMS in identifying the closest, most appropriate hospital to care for the needs of a child in the setting of a medical or traumatic emergency and provides the foundation to ensure high quality pediatric emergency care.

In this issue of the Pony Express we are beginning a new feature on our children's hospitals and children's specialty care centers throughout the State. This gives our facilities an opportunity to showcase who they are and the services they provide.

Read more about these programs and more in this issue. And, as always, if you have any stories that you would like to see in our newsletter, please send them to EMS for Children State Partnership, Texas Program Manager, Sam Vance at Samuel.Vance@bcm.edu



Shriners Hospitals for Children – Galveston: Pioneers in Pediatric Burn Care

By Dustin Johnson

Designated by the American Burn Association and the American College of Surgeons Committee on Trauma as a Verified Pediatric Burn Care Center, Shriners Hospitals for Children -Galveston provides highly specialized acute, reconstructive and rehabilitative care for children with burns and other soft tissue conditions. Inpatient and outpatient units are designed to allow children to recover in a safe, family-centered environment along the continuum of their care. The world-class physicians, clinicians, and researchers are committed to continuously provide advanced burn care and treatment to children from all over the world.

Since Shriners Hospitals for Children — Galveston entered the burn care field in 1966, the survival rate of children with burns over more than 50 percent of their body surface has doubled. Today, patients with burns over 90 percent of their body can survive and go on to lead full, productive lives thanks to the cutting-edge clinical care, research, and education. All care and services are provided regardless of the families' ability to pay.

New Technology Reduces Appearance of Scars

Cutting-edge technology and innovative research initiatives assist Shriners Hospitals for Children – Galveston in maintaining its status as a pioneer in pediatric burn treatment. Since first opening, doctors and researchers at the Galveston Shriners Hospital have developed numerous methods and techniques that have transformed the approach to burn care across the world. Today, plastic surgeons at the Galveston hospital are beginning to utilize a carbon dioxide (CO2) laser machine for reconstructing scars caused by burns and other accidents.

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EMSC State Partnership, TX Check out the EMSC State Partnership website at www.bcm.edu/pediatrics/emsc

To remove your name from our mailing list, please click here.



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EMS for Children Day May 20, 2015: EMS for Children Crew of the Year Nominations Underway

National EMS Week 2015 is May 17 thru May 23, and Wednesday, May 20, 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 2015, the Texas EMS

for Children State Partnership is now accepting nominations for the seventh 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.

Recipients will receive a special lunch celebration, 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.

To submit a nomination for the EMSC Crew of the Year, please send the following information to EMSC Program Manager Sam Vance by **March 31**, **2015**.

- (1) Names and titles of crew members
- (2) Agency or organization with contact information
- (3) A brief (500 words or less) description of the event or program and why you feel this crew deserves special honor and recognition
- (4) Your contact information (will not be disclosed without your permission)

Sam Vance at <u>Samuel.Vance@bcm.edu</u> Program Manager EMSC State Partnership, Texas 1102 Bates Ave, Suite 1850 Houston, TX. 77030

Houston Venom Conference

The Houston Venom Conference will be held June 20, 2015 at Baylor College of Medicine, 8:30am – 3pm. Registration is free and continuing education credits will be provided for EMS, Nursing, and Physicians. Tours and free time at the <u>Houston Zoo</u> immediately following, with a reception in the reptile house at 6pm. More information will be posted as it becomes available.







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Developing a Network of EMS for Children Family Advocates Across Texas

No one has more at stake in the assurance of high-quality pediatric emergency medical care than the parents and family members of children whose lives, at any given time, may be placed into the hands of their local emergency medical service provider. While no parent wants to believe that tragedy will strike their child, all parents have the right to expect that, if the unthinkable ever does happen, their child will be provided with the best possible care from prehospital professionals who are highly trained in pediatric emergency management, have the right tools and equipment, are guided by appropriate pediatric protocols and have access to physician consultation when needed. Parents should also be confident that their child will be transported to a hospital capable of providing the appropriate level of pediatric care.

In order to provide families with the opportunity to be a part of the EMS for Children effort to assure high-quality pediatric emergency medical care in Texas and to make sure that family issues are adequately represented in the State EMS and Trauma System, the EMS for Children State Partnership is reaching out to family volunteers across the state to form regional family advocacy groups that can be linked together to form a state-wide family advocacy network. Volunteers will be an intricate part of the EMS for Children program, working closely with the EMS for Children Advisory Committee and other stakeholders around the state to help guide the development of EMS for Children programs and

advocating for children's issues in local communities, in trauma service regions, and at the state level. Training and resources will be provided and a webpage on the <u>EMS for Children State</u> <u>Partnership website</u> will be dedicated to the family advocacy network. Volunteers in Texas will also be linked to the <u>National EMS for Children Family</u> <u>Advisory Network (FAN)</u> where they can access and share information with family advocates in 54 states and territories and have the opportunity to get involved at the national level.

Knowledge or experience with the emergency medical services system is not necessary to become a volunteer family advocate. However, EMS for Children family advocates are individuals who are interested in learning about state and local emergency services systems and who are passionate about children's safety and healthcare needs. Some have specific interests in the emergency care of children either due to their own personal experiences or to a related occupation or area of expertise. Others, however, are simply interested in helping to improve the healthcare for



children in their communities. Family representatives across the nation include teachers, consultants, homemakers, and students. Diversity is an essential characteristic of any effective state-wide representative network, and people from all backgrounds are encouraged to volunteer.

Family advocates represent the consumer's perspective, and the involvement of local community-based family volunteers in EMS for Children will help to integrate the practice of family-centered care into the emergency medical services system. Family-centered care is the concept of family involvement in all aspects of patient care, characterized by collaboration between the patient, the family, and health care professionals. If you would like more information about how you can become involved as an EMS for Children family advocate, or how to develop an EMS for Children volunteer family advocacy group in your community, please call the EMS for Children Office at 832-824-EMSC (3672), send us an e-mail at <u>Samuel.Vance@bcm.edu</u>, or visit <u>www.bcm.edu/pediatrics/emsc</u>

Did you know?

Did you know that per the 2010 U.S. Census Bureau, 27% of the State of Texas is under the age of 18? Comparatively, only 10% of the State is over the age of 65.





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EMS for Children Voluntary Pediatric EMS Recognition Program

The EMS for Children Voluntary Recognition Program is a new voluntary statewide initiative

for EMS agencies that wish to establish programs and standards to improve their capabilities to deliver care to pediatric patients. This is a multi-phase recognition program composed of three levels. The Bronze Level, required to obtain initial recognition, centers around EMS agencies carrying pediatric-specific equipment on their EMS vehicles beyond what is currently required for ambulance licensure in Texas. The Silver Level incorporates pediatric continuing education, and the Gold Level features community outreach education and injury prevention. As the program develops, additional levels may be added or enhanced.

Organizations who successfully complete the process will receive a certificate and a decal to affix to its ambulance(s) to recognize its accomplishment and commitment to the



youth of Texas. This is an excellent opportunity for your agency to receive recognition within your community and local media outlets for going "above and beyond". It is felt that the most meaningful recognition will come from your own communities and the pediatric patients that you treat.

This program is still in the draft phase, with the goal to pilot the program in late spring/early summer 2015. To view the entire draft document, please visit the EMS for Children State Partnership, Texas website: www.bcm.edu/pediatrics/emsc



New and Improved Website Now Available!

The EMS for Children State Partnership, Texas is excited to announce the launch of our newly designed website, which is located at the same address: <u>www.bcm.edu/pediatrics/emsc</u>. The website features new pictures and materials and will be updated on a regular basis with news of events and new content. If you experience any problems using the new website or if you have any suggestions, please contact EMS for Children State Partnership Program Manager, Sam Vance at <u>Samuel.Vance@bcm.edu</u>





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Next Steps in Pediatric Readiness: Is it Time for Pediatric Facility Recognition in Texas?



A 5-year-old chokes on a small rubber ball, and is rushed to their local emergency department (ED) in respiratory arrest. If the child arrived at your ED or the ED in your community, how can you ensure that it would be ready to provide appropriate pediatric care?

In 2005, the federal EMS for Children program established performance measures to assure the existence of a standardized statewide, territorial, or regional system that recognizes hospitals capable of stabilizing and/or managing pediatric medical emergencies and trauma. By 2017, all EMS for Children programs in each state/territory are required to have a system in place that recognizes these facilities.

Similar to trauma center designation, pediatric facility recognition aids EMS in identifying the closest, most appropriate hospital to care for the needs of a child in the setting of a medical emergency or traumatic injury.

At its core, pediatric recognition provides the foundation to ensure high quality pediatric emergency care. Successful pediatric recognition programs share many common traits: (1) Enhance awareness of pediatric emergency care gaps, (2) Understand hospital and EMS infrastructures within the state, (3) Establish and maintain strong partnerships, (4) Build interest in establishing a pediatric facility recognition program, (5) Determine minimal standards for staff qualifications, quality improvement, policies/procedures, continuing education, equipment and supplies, (6) Define levels of recognition to coordinate the "right care at the right place at the right time" for every pediatric patient and (7) Adapt and refine the process on an ongoing basis

In 2013, 305 of 504 hospitals in Texas participated in the National Pediatric Readiness Project (NPRP) assessment. These 305 hospitals treated 1,572,835 children in their emergency departments (ED). Of these children, 799,959 (51%) were treated in pediatric EDs, while the remainder were treated in general EDs without pediatric designation. In addition, 75% of these 305 hospitals have inpatient pediatric services, while 38% have a Neonatal Intensive Care Unit (NICU), and 9% have a pediatric intensive care unit (PICU). Therefore, it is essential for EMS agencies and hospitals to know which hospitals provide these limited, yet important resources for a sick or injured child.

EMS in Texas is fragmented in nature. In the metropolitan areas there are systems that are nationally recognized for their innovative programs and quality improvement initiatives. However, some rural areas of Texas do not even have Basic Life Support (BLS) EMS agencies. This level of fragmentation is also present in our EDs. In particular, critical access hospitals and their communities would especially benefit from pediatric facility recognition to be able to recognize and stabilize the critically ill and/or injured child, and enhance timely transfer to definitive care.

Pediatric facility recognition has been successfully implemented in several states, including Arizona, California, Oklahoma, Tennessee and Illinois. These programs have been well received with the input of a variety of stakeholders to suit the individual needs of each state.

The Texas EMS for Children State Partnership has received formal support from our partners with statewide organizations such as the Texas Emergency Nurses Association (TENA), the Children's Hospital Association of Texas (CHAT), and the Texas Pediatric Society (TPS). Next steps in the planning process will include those necessary to develop the strategic plan for the program and piloting the program in both an urban and rural Trauma Service Area. We anticipate implementing this step in approximately 1 - 2 years.

The EMS for Children State Partnership presented a webinar, "Next Steps in Pediatric Readiness: Is it Time for Pediatric Facility Categorization" in April 2014 to introduce the concept to stakeholders across Texas. To view this webinar, please visit the EMS for Children State Partnership, Texas website: www.bcm.edu/pediatrics/emsc





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Shriner's Hospitals for Children - Galveston (cont. from page 1)

Treatment of hypertrophic (raised) burn scars involves different approaches, depending upon the severity and type of patient signs and symptoms. Conventional management has included observation, massage, moisturizing agents, compression garments, silicone sheeting, steroid injection, and direct excision. However, laser therapies have recently emerged as an attractive method to treat hypertrophic burn scars.

"Utilizing the principles of selective photothermolysis and fractional ablation of abnormal tissue, new laser and light-based technologies permit targeted manipulation of the burn scar," said Ludwik Branski, M.D., plastic and reconstructive surgeon. "The ability to remodel thickened, disorganized dermis (skin) may accelerate burn scar maturation and yield results not previously possible."

By design, the CO2 laser reduces the thickness as well as softens patients' scars layer-bylayer. Last year, approximately 80 patients at the Galveston Shriners Hospital underwent procedures utilizing the CO2 laser technique. Doctors note that preliminary results in terms of scar color, pliability and size are encouraging for long-term success of reducing the appearance of hypertrophic scars.

"The laser is able to modify the scar by altering the collagen profile to one which resembles non-wounded skin," said William Norbury, M.D., plastic and reconstructive surgeon. "We are able to significantly improve the deeply pigmented scars by ablating the surface using the CO2 laser and allowing a controlled recovery, adding in topical agents if needed to prevent recurrence of the darker areas."

Currently, medical staff members in Galveston are extensively researching this technique in hopes of advancing scar management and improving outcomes for patients.

"We are currently conducting extensive studies with the use of our CO2 laser technique in order to ascertain the exact mechanisms of how this novel approach modifies hypertrophic burn scars, and to improve on our current use of laser surgery," said Dr. Branski.

State of the Art Tissue Bank

Each year, approximately 250,000 children are burned. These burns may be caused by fires or by contact with electricity, chemicals or hot liquids. No matter the source of the burn, each one needs specialized care. Often, this requires treatment with donated tissue. Through its Tissue Bank, Shriners Hospitals for Children — Galveston has been among the leaders in facilitating this innovative burn care.

One of the best ways to treat a burn wound is to use donated skin as a temporary cover until the patient's own skin can be grafted on the wound to heal. One donor can provide approximately 3 to 5 square feet of tissue – enough to save the lives of up to 20 children. Shriners Hospitals for Children — Galveston's Tissue Bank processes and uses approximately 1,000 square feet of this tissue annually.

"Tissue banks are generally either recovery or processing facilities," said Gabriella Hernandez, a tech at the Tissue Bank. "We are unique because we can do both."

Prior to opening, the Galveston Tissue Bank purchased tissue from other processors and stored it in the onsite clinical laboratory. In 2010, the hospital submitted a proposal to Shriners Hospitals for Children headquarters to rebuild the Tissue Bank. The proposal was accepted and in the summer of 2013, the new Tissue Bank opened and resumed recovering and processing life-saving tissue. The new facility is located inside the hospital, which will prove beneficial to the care process.

The primary service of the Tissue Bank is to provide skin grafts for surgery. "The tissue allows physicians to saves lives," said Stephen Williamson, manager of the Tissue Bank. "Without skin grafts, some of our patients would not survive."

By having the capabilities to recover and process tissue in-house, Shriners Hospitals for Children – Galveston will put its new facility to good use by processing skin and storing it until needed. In the event of a disaster, the Tissue Bank could also help the community by contributing tissue if there is a shortage.

Conditions Treated

Acute Burn Injuries Inhalation Injuries

- Complicated Wounds
 - Pressure Ulcers
 - Infected Wounds
 - Delayed Wound Healing
 - Exposed vessels, nerves, tendons

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Shriner's Hospitals for Children - Galveston (cont. from page 6)

Reconstructive Surgery

- Burn Contracture Release
- Facial Burn Deformities
- Hypertrophic Scar Revision
- Hand and Foot Reconstruction
- Breast Reconstruction
- **Congenital Malformations**
 - Microtia Deformities
 - Craniofacial Deformities
 - Hemangiomas
 - Port Wine Stains
 - Hairy Nevus

Soft Tissue Conditions

- Soft Tissue Infections
- Toxic Epidermal Necrolysis
- Stevens-Johnson Syndrome
- Epidermolysis Bullosa
- Necrotizing Fasciitis

Facts & Figures

- Chief of Staff and Director of Research, Dr. David Herndon
- Treat more than 1,000 children each year. To date, cared for children from 43 states and 49 foreign countries
- In 2014, 101 new basic research grant applications, 23 new clinical research grant applications, and 14 new developmental grant applications
- 2014 research budget supports and funds 71 bench science projects, 47 clinical research trials and 20 special shared facilities, for a combined value of \$19,666,218
- Home to the only Critical Care Fellowship for burns in the United States that leads to certification in critical pediatric burn care
- Total Burn Care 4th edition (primary textbook for burn care): 36 of 66 chapters written by Galveston authors
- Published more than 860 manuscripts since 2003

www.shrinershospitalsforchildren.org/galveston











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Final Thought

The secret of change is to focus all of your energy, not on fighting the old, but on building the new. ~ Socrates

Upcoming Events

Mark Your Calendar



- <u>TRAC V 18th Annual Trauma Symposium, Voices</u> of Trauma: March 25 - 27 at the Hilton Garden Inn, South Padre Island, TX
- <u>Texas EMS Educators Summit 2015</u>: April 10 11, at the Omni Corpus Christi Hotel, Corpus Christi, TX
- <u>Community Integrated Mobile Healthcare</u> <u>Symposium:</u> April 24 at the Historic Uptown Theater, Grand Prairie, TX
- <u>EMS for Children Advisory Committee Meeting:</u> May 13 at the Crowne Plaza Hotel, Austin, TX
- <u>EMS Week</u>: May 17 23
- <u>EMS For Children Day</u>: May 20
- <u>Panhandle RAC A Pediatric Conference</u>: May 20, Texas Tech Laura Bush Center, Amarillo, TX
- <u>11th Annual Texas Parent to Parent Statewide</u> <u>Parent Conference</u>: June 12 - 13 at the Embassy Suites, San Marcos, TX
- Houston Venom Conference: June 20 at Baylor College of Medicine, Houston, TX
- <u>Texas EMS Conference</u>: November 22 25 at the Dallas Convention Center, Dallas, TX