

# EMSC Connects

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May 2016

Emergency Medical Services for Children  
Utah Bureau of EMS and Preparedness

## Special points of interest:

- Water Safety
- Submersion Injury Protocol
- Safety at the ballpark

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## A Word From Our Program Manager

I know some people may not like these cool rainy spring days, but I find them quite enjoyable. The air is fresh and clean, the grass looks so green and the colors of everything "nature" seem brighter. It's the quiet time before the hot active days of summer and the storm of weddings, graduations, reunions and vacations. It gives me time to reflect and be grateful for many things or plan and prepare for the wide range of summer activities.

Speaking of grateful, May hosts EMS Week (May 16-20, 2016) and EMSC Day (May 18, 2016). I want to let you in on a little secret. For EMSC Day, the Utah EMSC team has collected some fantastic artwork and hand written thank you notes from grade school aged children at the Safe Kids Fair, Primary Children's Hospital and local schools. We will be sharing a sample of these thank you notes with all EMS agencies as our way to say thanks for all you do and to let you know the youngest and one of the most vulnerable of our population are grateful too.

As you can see below, the artwork is unique and precious, and the words will make you laugh and touch your hearts. It was most revealing to me to see that they know what you do, how you do it, and are genuinely appreciative. Some children called you heroes, some children want to grow up to be like you, and some children wrote about personal experiences where you helped a friend or family member. Out of the mouths of babes, they said you saved the world.

Thank you for learning more about the needs of children and how to treat them on a daily basis and in the event of a disaster. Thank you for your time and efforts, you do make a difference. Please let us know how we can help you, help them. Thank you and be safe.

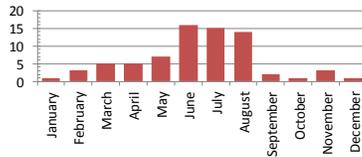
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Pediatric Drowning, by Month, 2011



Though the above graph is from 2011 this pattern repeats itself every year.

Pediatric drownings spike May-August  
Are you ready to respond?



A few visual reminders about safe water play and bathing

## Pedi Points

Tia Dalrymple RN, BSN

Unfortunately it's starting already. We have seen several drownings and submersion injuries already this year. The data shows that the spike starts in May and continues through August. Children love water. Traditionally the top counties to report downing PCRs in Utah are Salt Lake, Washington, and Utah but it can happen anywhere. Though a victim may begin to breathe again after rescue, they are still at risk for progressive injury and should be transported to definitive care as soon as possible. This is especially true for children. A child may seem fine right after the event but as swelling and other complications set in, some children can lose their ability to compensate and are at risk for sudden cardiac arrest

## Expert Input

Cambree Applegate, MS, CHES, Safe Kids Utah Director  
Violence and Injury Prevention Program Utah Department of Health

Drowning is the leading cause of injury-related death for children aged 0-9 in Utah. From 2010-2014, 47 Utah children under the age of 19 died from drowning. There are several age distinct patterns among Utah child drowning deaths:

**Toddlers (ages 1-4) wandering off.** The most common scenario involves an under-supervised child wandering off during a weekend family gathering – with several adults present but none designated as the official “child watcher” – and falling into a body of water (like a pool, stream, pond, creek, or irrigation ditch). In some cases, the child was thought to be indoors but had managed to get out of the house undetected.

**Teens (frequently males) swimming with friends at a reservoir or lake.** Many of these deaths are “witnessed” drownings, where friends or family members see the victim go under the water and are unable to rescue them. Overestimating swimming abilities and peer pressure to take risks are thought to be factors in these deaths.

**Infants left unattended in bathtubs.** These drownings also include cases where an infant was left alone in a bathtub with an older brother or sister.

Drowning can happen even when a child is being supervised. Many people don't realize that **drowning is often silent**. This means someone who is drowning is not able to shout for help or grab onto something. When they come above water they only have time to inhale and exhale. It is important especially for parents of young children to be able to identify signs of a drowning child.

## Signs of drowning:

- Head low in the water, mouth at water level
- Head tilted back with mouth open
- Eyes glassy and empty, unable to focus or closed
- Hair over forehead or eyes
- Vertical in water – not using legs
- Hyperventilating or gasping

## Expert Input

- Trying to roll over on the back or trying to swim but not making headway
- Appear to be climbing an invisible ladder

Keeping your child safe is your number one priority. Water is dangerous at any depth. It can take just seconds for a child to drown. Water can be a lot of fun, but there are some things you can do to make sure your child stays safe.

### Tips to keep kids safe in the water:

- ◆ Children can drown in as little as one inch of water. Make sure to prevent children from gaining access to areas of the house where water is present (i.e. bathtubs, sinks, and toilets). Never leave an infant or young child alone in the bathtub or with "older" siblings.
- ◆ When not in use, drain and keep kiddie pools and buckets out of reach from children.
- ◆ Actively supervise children in and around bathtubs, pools and open bodies of water, giving undivided attention, and watching for signs of drowning.
- ◆ If several adults are present, designate a "child watcher" to watch children in and around the water. Adults should take turns so everyone can have fun and stay safe.
- ◆ No matter where children might swim, teach them to always swim with an adult. Even older, more experienced swimmers should swim with a partner. Teach kids when they are young that they should never go around water without an adult present.
- ◆ Warn teenagers of the risks of overestimating how well they swim. Even experienced swimmers can drown.
- ◆ Learn CPR. Being able to perform CPR if needed is an essential skill that every parent should have to be able to use if needed.
- ◆ Wear a life jacket. Especially out in open water a life jacket will help give children and adults extra support in the water. Even expert swimmers should wear a life jacket.
- ◆ Have everyone wear a Coast Guard-approved life jacket while on a boat or during water sports. Children should also wear a life jacket when near open bodies of water.
- ◆ If you are having a hard time locating your child, check areas where they might gain access to water first.
- ◆ Install a carbon monoxide detector aboard houseboats.
- ◆ Never dive into unknown or shallow waters.
- ◆ Enclose pools and hot tubs with self-closing and locking gates/fences.

Visit [Safekids.org](http://Safekids.org) for more age appropriate tips for your child.

**HELP...**

**100%**  
of drownings  
are preventable<sup>1</sup>

**THE FACTS**

69% of people who drown are adults<sup>2</sup>

70% of teen & adult drownings involve alcohol<sup>3</sup>

Percentage of adult men more likely to drown than women<sup>4</sup> **79%**

9 out of 10 deaths of children on the autism spectrum (age 1-14) are by drowning<sup>5</sup>

73% of children 5-14 who drown are African American<sup>6</sup>

Just 4 minutes without oxygen causes brain damage<sup>7</sup>

**★ 10 ★**  
**SMART TIPS**

1. Supervise children at all times
2. Get babies and children swim lessons
3. Never use floaties - they are a toy
4. Learn CPR every two years
5. Fence or cover your pool
6. Use life jackets - they save lives
7. Never swim alone
8. Know that drowning can be silent
9. Clear toys from pool area
10. Keep rescue equipment & phone by the pool

## Protocols in Practice

### Submersion Victim

Submersion injuries can occur in any body of water such as bathtub, swimming pools, buckets, and open bodies of water (ponds, rivers, and streams). There can also be co-existing conditions depending on the type of submersion injury including trauma, hypothermia, and intoxication. Mental status may range from normal to impaired. Patients can be cyanotic, pale, have labored respirations with retractions, or appear well with minimal injury. All patients require some medical assessment beyond the what is done on scene.



***Congratulations  
Andrew Ostler!***

## BLS

- Perform a general pediatric assessment.
- Assess and maintain airway patency.
  - Oxygen 10-15 lpm via NRB to maintain sats >95%
  - If pt is apneic, being BVM with 100% oxygen.
- Initiate CPR for pulseness arrest or symptomatic bradycardia.
- If trauma is suspected or incident unwitnessed, protect the spine.
- Obtain a core body temperature.
  - Protect patient from hypothermia and initiate warming methods as indicated.
- Reassess and transport for medical evaluation.

## ALS

- Follow the BLS procedures.
- Place on cardio-respiratory monitor and continuous pulse oximeter.
- Intubate if patient is apneic, unresponsive, has severe respiratory distress or depression or if unable to effectively ventilate or oxygenate the child.
- Place IV/IO. If patient is hypotensive for age give 20ml/kg of NS or LR
  - Repeat once if signs of shock persist after initial bolus.
- Reassess and transport for medical evaluation.

### Key Points

- ◆ Submersion in cold water will often cause severe hypothermia. Notify receiving hospital immediately of transport of hypothermic patient so that appropriate resources can be mobilized. **Report the patient's core body temp and water temp to the hospital when possible**
- ◆ Hypotension is associated with worse outcomes. If in doubt, give fluid.

### Did You Know?

**Our own Andy Ostler is the Emergency Medical Services Injury Prevention Advocate of the Year**

While Andy's years of service as a Paramedic were exemplary, he was selected for this award for his time with EMSC. Andy travels (sometimes at the drop of a hat) to bring injury prevention programs like Buckle Tough and the bike rodeo to all areas of the state. He single handedly maintains the bike rodeo trailers and mans Buckle Tough booths at fairs and conferences. Directly because of Andy's involvement Utah's kids are taught to be safer. We appreciate all that he does for this program. **Congratulations Andy!!!**



## Coordinators Corner

Craig Hemingway, EMSC Salt Lake County Coordinator

### 5 tips at the ball park

I was asked to come up with some safety and prevention tips at the Ball Park. As a coach, spectator or an EMS responder you see many things at the “Yard”. Here are some things to look watch for at the Ball Park.



1. **Foul balls:** Kids and adults love being close to the action. The first time this kid gets a foul ball hit to the fence he may change the way he stands near the fence. If you want to lean against the fence use a “Flat hand” instead of fingers through the fence.
2. **Blunt trauma:** Balls and Bats can leave the field of play. PAY ATTENTION!



<http://abcnews.go.com/US/mans-quick-thinking-saves-boys-face-baseball-game/story?id=37466437>

3. **Speed Recognition:** High school games are much faster than little league games; reflexes are faster as well. At a High school Baseball / Softball game, the ball will be moving a lot faster. You will want to find out if the ball was tipped, kicked or otherwise slowed down prior to hitting the player
4. **Line Drives:** Pitchers are the closest to the batter and most likely to get hit. A line drive to the chest could stop the heart. A detailed assessment is a must! Was there a loss of consciousness? What medications are they on?
5. **Food, Hydration and the Elements:** Families may come to games from work or kids may play in a tournament all day. Some tournaments are four games in a single day! They may not have eaten an appropriate meal. Perhaps they ate breakfast and split a nacho. Kids metabolism burns faster, they may burn through food stores. Getting an appropriate food and drink intake as well as a blood sugar should be a priority. Also let's not forget about the families who are sitting in the sun all day as well. Do they have on sunblock? How are they feeling?

There is nothing like a day at a ball game. Kids of all ages will present with different problems. These kids have all sorts of medical histories, allergy's and any other challenges of a boy/ girl could have. Throw in puberty and teen challenges who know what could be happening. Asking the right questions are crucial full detained assessment with a complete workup.

Just remember, as in life... keep your eye on the ball J



# May 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5 PGR	6	7
8	9	10 EGR	11	12 PGR	13	14
15 EMS WEEK →	16 	17	18  EMSC DAY PCH breakfast 0800	19 PGR	20 	21
22	23	24	25	26 Cassia PALS → PGR	27	28
29	30	31				

## Pediatric Education Around the State

**Pediatric Grand Rounds (PGR)** are educational/CME offerings webcast weekly (Sept-May) you can watch live or archived presentations. It is geared towards hospital personnel. But will certify as BEMSP CME Access at <https://intermountainhealthcare.org/locations/primary-childrens-hospital/for-referring-physicians/pediatric-grand-rounds/>

**EMS Grand Rounds (EGR)** This offering alternates with Trauma Grand Rounds every other month, it is geared towards EMS. Live viewings qualify for CME credit.

**May 10** "Trauma Care" Scott Youngquist MD

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](mailto:Zachary.robinson@hsc.utah.edu))
2. Delayed viewing at your personal convenience, a week after the presentation at: [www.emsgrandrounds.com](http://www.emsgrandrounds.com)

## Upcoming Peds Classes, 2016

For PEPP and PALS classes throughout the state contact Andy Ostler [Aostler@utah.gov](mailto:Aostler@utah.gov)

### **Initial PEPP classes**

May 20-21 Dixie State Initial PEPP

May 26-27 Cassia PALS Provider/ Renewal

June 3-4 Logan Initial PEPP

### **Renewal PEPP classes**

June 11. Spanish Fork PEPP Renewal

For PALS and ENPC classes in Filmore, Delta and MVH contact Kris Shields at [shields57@gmail.com](mailto:shields57@gmail.com)

## Save the Date

**May 15-21** EMS Week

**May 18** EMSC Day, 8a -11a Come enjoy an EMS appreciation breakfast at Primary Children's Hospital

**June 16-18, 2016** EMSC Coordinators Workshop

## Emergency Medical Services for Children

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Follow us on the web  
<http://health.utah.gov/ems/emsc/>  
and on Twitter: EMSCUtah

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.

## Happenings



Lynsey Cooper, Primary Children's EMS Liaison now has a business card that you will be given in the Emergency Department if you want follow up on patients brought to Primary Children's. Lynsey is also a great resource for pediatric education. Need speakers, classes, pediatric training night information? She is your girl! Want to give feedback to Primary's Emergency Department? She will hear you out.

# May 16th is EMSC Day

## Primary Children's is hosting a breakfast for EMS week.

## May 16th 8-11 outside the ED, come fill your belly and pick up some swag