



37th Arrowhead EMS Conference & Expo

Friday, January 20, 2017 – Presentation Information

All information provided by presenter(s)

Main Dining Area - KEYNOTE

Session: "The Psychology of Pediatric Resuscitation in the Field"

Friday, January 20, 2017

Presenter(s): Dr. Peter Antevy

8:30 am - 10:00 am

Session Description: Provider anxiety and medication administration complexities are the two major obstacles faced by field providers today. Children, the most vulnerable portion of our population, are at the greatest risk of harm from medical errors. After over 15 years as a Pediatric ED provider and 5 years in EMS Dr. Antevy explores alternative reasons for this big problem with small people. During his presentation Antevy will outline deep-rooted brain processes that are directly related to poor quality pediatric care and will provide evidence based processes that mitigate the issues.

Session Objectives:

- Discuss the neuro-psychological considerations relative to providers during Pediatric resuscitation
- Explore specific communication techniques that can mitigate errors during out-of-hospital pediatric care.
- Describe system 1 and 2 thinking as it relates to pediatric care in the field

French River Room – Advanced Life Support Track

Session: "Pharmacology of EMS Medications for ALS"

Friday, January 20, 2017

Presenter(s): Richard Mullvain

11:00 am - 12:30 pm

Session Description: Learn about ALS medications given in the field by EMS, from the region's only cardiology specialized clinical pharmacist.

Session Objectives:

- Review the common medications utilized by ALS services
- Learn about the Pharmacology and proper use of ALS medications
- Consider the pitfalls and challenges of ALS medications given in the field by EMS

Session: "Capnography: Valued or Undervalued?"

Friday, January 20, 2017

Presenter(s): Jason Dush

1:30 pm - 3:00 pm

Session Description: Capnography has become the golden standard and is being used by paramedics primarily to aid in their assessment and management of the intubated patient in the prehospital environment. So how does monitoring of ETCO₂ really help steer the management and treatment of the intubated and non-intubated patient? With the technology of waveform capnography, how valuable is it in the assessing the hypoperfused patient? This session will look at the overall uses of waveform capnography and how paramedics can better assess and manage their patients.

Session Objectives:

- Review the pathophysiology of wave for capnography
- Discuss normal and abnormal ventilation/perfusion relationships
- Discuss the benefit of capnography for patient management other than intubation

Session: "The Sick AMI Patient"

Friday, January 20, 2017

Presenter(s): Chris Ebright

3:30 pm - 5:00 pm



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Session Description: Cardiogenic shock secondary to myocardial malfunction has serious consequences for any patient experiencing an AMI. This presentation explains the causes, pathophysiology and mechanics behind the development of cardiogenic shock as well as how to assess and treat these patients in the prehospital setting.

Session Objectives:

- Participant shall be able to list 4 causes behind the development of cardiogenic shock.
- Participant shall be able to explain the pathophysiology of cardiogenic shock.
- Participant shall be able to describe different treatment options for a patient suffering from cardiogenic shock.

Lake Superior Ballroom L, M – Basic Life Support Track

Session: “Don’t Get Burned”

Friday, January 20, 2017

Presenter(s): Reuben Farnsworth

11:00 am - 12:30 pm

Session Description: We will review burn estimation using the Rule of 9’s, review the Parkland Formula, and review calculation of drip rates. After that, we will practice, practice, practice. We will estimate burns on patients and calculate their fluid resuscitation. Bring a pencil, a smartphone and a calculator.

Session Objectives:

- The student will understand TBSA estimation using the rule of 9’s
- The student will understand and be able to apply the Parkland Burn Formula as it relates to fluid resuscitation in burn patients
- The student will be able to differentiate critical from non-critical burns based on criteria and pt. presentation

Session: “Hit Me With Your Best Shot”

Friday, January 20, 2017

Presenter(s): Chris Ebright

1:30 pm - 3:00 pm

Session Description: Sudden death due to ventricular fibrillation may occur when a projectile, such as a baseball or hockey puck strikes the chest of a child with no underlying cardiac disease. This is known as commotio cordis. Although it is a relatively rare event, quick assessment, resuscitation and defibrillation can many times produce a favorable outcome. This presentation will explain the pathophysiology and treatment of this anomaly.

Session Objectives:

- Participant shall be able to identify the need for prompt BLS and ALS care during a cardiac arrest.
- Participant shall be able to describe the pathophysiology of a cardiac arrest due to commotio cordis.
- Participant shall be able to explain proper treatment for a patient suffering the consequences of a commotio cordis incident.

Session: “Cowboy Up And Die!!!”

Friday, January 20, 2017

Presenter(s): Reuben Farnsworth

3:30 pm - 5:00 pm

Session Description: We’ve all done them before, and many of us love them; rodeo standby. These are what I like to refer to as a Trauma Rich Environment. Have you ever stopped to consider some of the common injuries that we see from rodeo accidents, and even more importantly, we will discuss the multi-faceted aspect of team safety in the rodeo environment. Be ready for some great pictures, videos and discussion about the wild world of rodeo trauma.

Session Objectives:

- The student will understand the many scene safety issues which may be present at the scene of a rodeo trauma.



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- The student will be able to identify common mechanisms of injury in rodeo trauma.
- The student will be able to anticipate common underlying injuries in the setting of rodeo trauma.

Lake Superior Ballroom N, O – Pediatric Track

Session: "The Miracle of Life...Almost"

Friday, January 20, 2017

Presenter(s): Chris Ebright

11:00 am – 12:30 pm

Session Description: Luckily, most pre-hospital deliveries involve a catch, suctioning and warming the newborn. Sometimes though, Murphy's Law gets in the way - resulting in a complicated birth. Topics including placenta previa, abruptio placenta, shoulder dystocia, CPD and breech birth are explained in this not-always-necessary-but-essential-to-know presentation.

Session Objectives:

- Participant shall be able to identify the complications associated with pregnancy and delivery.
- Participant shall be able to describe how to manage various abnormal deliveries.
- Participant shall be able to contrast a normal and abnormal delivery procedure.

Session: "A Cautionary Tale-Implementing the 2015 PALS Guidelines"

Friday, January 20, 2017

Presenter(s): Dr. Peter Antevy

1:30 pm – 3:00 pm

Session Description: The 2015 Guidelines have been published and you are integrating new policies into their practice. But should you? Dr. Antevy takes you through the 18 updates and recommendations published by the AHA and discusses the evidence behind each. Be prepared to be surprised as you are surely to have more questions than answers after this exciting talk.

Session Objectives:

- Describe the process by which the AHA updates its recommendations
- Understand the 18 PALS recommendations and the evidence base behind each
- Describe how the strength and quality of evidence plays into deciding how to evaluate the guidelines.

Session: "The Wiggles"

Friday, January 20, 2017

Presenter(s): Jeff Schultz

3:30 pm – 5:00 pm

Session Description: This lecture will look at pediatric patients and seizures. Assessment, causes and treatment will be covered. This lecture is for FR, EMT and paramedic. An in depth look at a common medical emergency in the pediatric patient

Session Objectives:

- Be able to describe different types of pediatric seizures.
- Identify the causes of pediatric seizures.
- Describe the initial assessment, support and care given for pediatric seizures.
- Become more comfortable dealing with the seizing child/infant.
- Have a better understanding of the use of anticonvulsant medications in the seizing child.



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Gooseberry Falls Room – General Track

Session: "Implanted Devices"

Friday, January 20, 2017

Presenter(s): Jason Dush

11:00 am – 12:30 pm

Session Description: With advancements in today's medical technology, what are we seeing in the prehospital world? The days of patients being connected to large medical equipment or needing to be admitted to the hospital to receive care have significantly been reduced. We are seeing patients with small implanted devices, IV access lines and LVAD's for long term care. Let's take a look from the inside and see how EMS can better understand and manage this growing patient population.

Session Objectives:

- Discuss the common implanted medical devices
- Discuss common patient management challenges
- Discuss transport and protocol considerations

Session: "STEMI Case Studies and Lessons for EMS"

Friday, January 20, 2017

Presenter(s): Richard Mullvain

1:30 pm – 3:00 pm

Session Description: Review actual STEMI case studies from our region. Learn tips and tricks for EMS to focus on to improve our STEMI System of Care, and make a difference in the lives of STEMI patients.

Session Objectives:

- Consider process improvement opportunities for EMS in the provision of STEMI care.
- Review actual STEMI cases from our region, and learn how to provide better STEMI care.
- Review the basic concepts of STEMI and guideline based treatments.

Session: "What is Killing Our Young Athletes"

Friday, January 20, 2017

Presenter(s): Jason Dush

3:30 pm – 5:00 pm

Session Description: The US Centers for Disease Control (CDC) says that roughly 70-110 young competitive athletes die from sudden cardiac arrest every year. "They call this the silent killer because we don't know about it until it happens. The first sign or symptom they have is cardiac arrest." This problem can be challenging for schools and first responders. Athletic trainers and EMS providers have different skill sets and areas of expertise; the collaboration between them provides injured/ill athletes the best possible emergency care. What does your agency have in place?

Session Objectives:

- Discuss the latest statistical data regarding deaths of young athletes
- Discuss common patient management challenges
- Discuss the benefit of a proactive approach to joint training with schools

St. Louis River Room - General

Session: "Cell Phones: Bane or Boon?"

Friday, January 20, 2017

Presenter(s): Ron Lawler

11:00 am – 12:30 pm

Session Description: Your students carry powerful computers with them everywhere. This session will discuss how to take them from a distraction to a powerful tool in your learning environment.



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Session Objectives:

- Students will learn techniques to utilize student phones during lectures.
- Student response systems will be discussed, demonstrated and practiced with by the students.

Session: "The Special Needs Patient"

Friday, January 20, 2017

Presenter(s): Ron Lawler

1:30 pm – 3:00 pm

Session Description: This session will help providers identify, assess and treat patients with special healthcare needs. Ron will discuss the challenges faced by these patients and by the providers caring for them NCCR Special Healthcare Needs

Session Objectives:

- Students will learn to identify different types of special needs patients.
- Assessment techniques for different patient populations will be discussed.
- Students will discuss how their own attitudes affect their care of these populations.

Session: "Autism and First Responders"

Friday, January 20, 2017

Presenter(s): Dawn Brasch

3:30 pm – 5:00 pm

Session Description: Autism is the fastest growing disability in Minnesota. Because of the high prevalence, it is inevitable that you will encounter someone affected by ASD in your work as a First Responder, law enforcement, security and medical professional.

Session Objectives:

- Tactical approaches to encounters with people with ASD in stressful situations
- Understand how Autism presents and how it affects your job
- Practical communications with those who are non-verbal or limited in ability

Split Rock Room – Education Track

Session: "We are Gate Keepers"

Friday, January 20, 2017

Presenter(s): Brad Wright

11:00 am – 12:30 pm

Session Description: Ever had a student that excels at skills but can't pass a test? Or a student gets so nervous before every test that they ultimately perform poorly? We all have students that pose challenges to us. Our job as educators is to provide rigorous yet manageable education. Join Brad as we look at tools and strategies to help these students succeed and when it is time to encourage a student to step out – for we are the Gatekeepers to the EMS profession.

Session Objectives:

- Present strategies to help problematic students achieve success
- Discuss different methods of remediation and strategies for success
- Provide insight as to tell a student they will not be successful



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Session: "I've Transitioned. Now What? "

Friday, January 20, 2017

Presenter(s): Brad Wright

1:30 pm – 3:00 pm

Session Description: Now that all EMS providers in Minnesota have transitioned, the question remains about what NCCR, LCCR, and ICCR mean. This presentation will shed light on how a provider can attain their hours under each category. So if you're confused, curious, or have questions about the post-transition process, join Mary, Lisa and Brad as they assist in helping bring clarity to the process.

Session Objectives:

- Describe the NCCR process of EMS Provider renewal
- Discuss the renewal process Minnesota has adopted
- Provide examples for providers to assure proper classification of hours in their renewal

Session: "Toxicology from the Emergency Department Trenches"

Friday, January 20, 2017

Presenter(s): Dr. Christopher Delp

3:30 pm – 5:00 pm

Session Description: Trendy drugs, plants as murder weapons, local grown hallucinogens and new concoctions and their antidotes

Session Objectives:

- Learn various toxins and their current and historical use for murder
- Use case studies for the approach to unknown overdoses
- Become familiar with the effects of agitate

The College of St. Scholastica – Anatomy Labs

Session: "Human Anatomy Lab #1"

Friday, January 20, 2017

Presenter(s): Lindsay Jensen and Dr. Gary Foley

10:00 am – 12:00 pm

Session Description: Basic introduction into anatomy and physiology for those involved with pre-hospital care. In this interactive class, students will be given an opportunity for hands on education on donor bodies (cadavers) in an actual human anatomy teaching lab. They will be shown dissected human bodies while having an opportunity to see and explore the relation of anatomy to illness and injuries. Effects of trauma and emergency procedures on the body will be discussed and demonstrated. Seeing the great internal variability of the human body will help students recognize the need to approach each patient individually. This session will be taught by an Emergency Medicine physician as well as an anatomy instructor. Questions are encouraged.

Session Objectives:

- To learn more about human anatomy and physiology
- Review the pathology of causes of death
- To recognize what happens internally to organ systems from direct or penetrating trauma
- Experience hands-on exploration of human muscle and organ attributes
- To learn how early EMS treatment can reduce the morbidity/mortality of our patients



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Session: "Human Anatomy Lab #2"

Friday, January 20, 2017

Presenter(s): Lindsay Jensen and Dr. Gary Foley

1:00 pm – 3:00 pm

Session Description: Basic introduction into anatomy and physiology for those involved with pre-hospital care. In this interactive class, students will be given an opportunity for hands on education on donor bodies (cadavers) in an actual human anatomy teaching lab. They will be shown dissected human bodies while having an opportunity to see and explore the relation of anatomy to illness and injuries. Effects of trauma and emergency procedures on the body will be discussed and demonstrated. Seeing the great internal variability of the human body will help students recognize the need to approach each patient individually. This session will be taught by an Emergency Medicine physician as well as an anatomy instructor. Questions are encouraged.

Session Objectives:

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- Review the pathology of causes of death
- To recognize what happens internally to organ systems from direct or penetrating trauma
- Experience hands-on exploration of human muscle and organ attributes
- To learn how early EMS treatment can reduce the morbidity/mortality of our patients