Emergency Conference 2017

Co-sponsored by:
UnityPoint Health- St. Luke’s
Mercy Medical Center- Sioux City
Western Iowa Tech Community College

Date: Friday, Feb. 24 and Saturday, Feb. 25
Check-in starts both days: 7 am
Program: Friday 8 am – 5 pm  Saturday 8 am – 4 pm

Location: Sioux City Convention Center, 801 4th St., Sioux City, IA

Purpose and Target Audience:
This annual two day continuing education event for EMR’s, EMT’s, paramedics, nurses, first responders, firefighters, police, dispatchers, educators, public safety and other health care professionals is designed to provide current information in the field of pre-hospital and Emergency Department care and to enhance patient outcomes and the quality of Emergency Services provided.

Agenda, Speakers and Objectives

Friday, February 24

7:00 a.m. Registration & Sign in, View Exhibits, and Continental Breakfast
7:50 a.m. Welcome and Announcements
8:00 a.m.

Keynote Address: The State of Simulation Today
Heather Davis, EdD, NRP

Whether simulation means a full-scale disaster drill or performing a skill on a manikin, come learn how simulated educational events are being used for teaching and testing in today’s EMS environment. Learn about best practices, advantages and challenges presented by simulation and how to benefit on any budget. This session will use video to assess patients and the care provided in simulated environments.
At the conclusion of the program participants should be able to:

Objectives:
1.) Differentiate between scenario, simulation, and standardized patient experiences
2.) Describe best practices in simulation within the context of learning theory
3.) Identify challenges in simulation environments
4.) Identify provider strengths and mistakes through video evaluation of patient care situations

9:10 a.m.

**How Airway and Breathing Affects Circulation**
Heather Davis, EdD, NRP

Shock is not a circulatory problem, often, patients go into shock from an airway or breathing compromise. This case-based session makes preventing shock understandable for EMT’s and Paramedics.

Objectives:
1.) Use the Fick principle to explain how airway and breathing cause circulatory problems
2.) List current medications used in the management of respiratory distress and failure
3.) Differentiate between pleurisy, effusion and failure

**Toxic Syndromes: A Real Cluster of Symptoms**
Kimberly Zellmer, PharmD, BCPS, SPI

A toxidrome is a constellation of signs and symptoms which may result from a particular class of poison. This program is designed to help the provider in identification of multiple different toxidromes caused from poisons, such as anticholinergic, cholinergic, adrenergic, sedative-hypnotic, and more. Common drugs that cause these toxidromes and general poison management will be discussed.

Objectives:
1.) Differentiate between toxidrome presentations
2.) List common medications that cause class specific toxidromes
3.) List multiple components of a patient’s history that are helpful in a toxicology assessment
4.) Recognize common toxicology treatments based on a presenting toxidrome

**Current Trends in Trauma Care**
Eric V. Ernest, M,D., EMT-P, FACEP, FAEMS

This presentation will review current trends in trauma care including selective spinal immobilization and permissive hypotension.
Objectives:
1.) Differentiate who needs spinal mobilization
2.) List the nexus criteria and be able to apply them
3.) Summarize the concepts of permissive hypotension
4.) Summarize the reasons to avoid hyperoxia in trauma

10:10 a.m. Break

10:30 a.m.

**Home Medication Heartache**  
Heather Davis, EdD, NRP

It seems there is a pill for every ill. Knowing which medications to use in pre-hospital emergency is one thing, but understanding the thousands of medications used at home by patients and their interactions is quite another feat. This session will focus on the mechanism of action of cardiac drugs by class in order to ensure participants leave with knowledge of the most common drugs and most lethal drug interactions in the field. This session has pearls of wisdom for all levels of providers.

Objectives:
1.) Describe why each of the four classes of antidysrhythmic medications are used in prehospital medicine compared to one another
2.) Differentiate between the classes of medications used to treat hypertension
3.) Determine three dangerous drug interactions among the cardiac medications

**Stroke Assessments: Miami to Cincinnati**  
Terry Ragaller, EMT-P

Stroke care has evolved in the past few years. With more attention to the “more subtle” strokes that may escape EMS providers, there are new assessment tools such as the MEND exam, to help capture these possible events. This class will help attendees on current standards and exams, as well as care for stroke patients.

Objectives:
1.) Recall the anatomy and physiology of the brain and vasculature
2.) Recognize the signs and symptoms of strokes past obvious signs and symptoms
3.) Differentiate Cincinnati Pre Hospital Stroke Scale (CPHSS) and Miami Emergency Neuro Deficit (MEND) exam
4.) Summarize current trends in EMS care for stroke patients
Agricultural Emergencies: A City Slicker’s Approach to Uncommon Injuries
Matthew Fults, NRP, CCP

This course focuses on agricultural trauma and some of the many emergencies that can be encountered on the farm. In the heartland or in the city, EMS providers encounter situations relating to agricultural that are anything but common. In this course we will focus on a common sense approach to ensuring quality patient care and provider safety when responding to agricultural incidents.

Objectives:
1.) Recall the basic terminology and equipment commonly encountered in the agricultural industry
2.) Identify common injuries encountered by EMS providers when providing medical care for victims of an agricultural emergency
3.) Summarize strategies for maintaining provider safety when on the scene of an agricultural emergency

11:30 a.m. Lunch

12:30 a.m.

Clinical Decision Making
Heather Davis, EdD, NRP

The accumulation of facts is not nearly so difficult as knowing what to do with that information. This session requires the audience to become involved in “solving” the case. Each group is presented with an interesting or unusual patient situation, based on assessment findings of the case, the group will attempt to determine a list of differential diagnosis and treatment plan. The facilitator will review pertinent pathophysiology with the group. Each group will then present their case to the group at a large “Grand Rounds” fashion.

Objectives:
1.) Create a list of differential diagnosis based on the presenting problem and assessment findings
2.) Determine a treatment plan based on assessment findings of unusual prehospital cases
3.) Recognize the in-hospital diagnostic tests and treatments prescribed to patients

Bureau of Emergency and Trauma Services Updates- Iowa Dept. of Public Health
Mary Chwirka, Paramedic, Critical Care

Objectives:
1.) Recall the updates to programs and projects within BETS
2.) Use the BETS web page
3.) Carry out the individual on-line account process and the on-line renewal process
4.) Identify the current status of Iowa EMS programs and providers

**Owning the Outcome: Examining Pre-Hospital Cardiac Resuscitation**

Matthew Fults, NRP, CCP

EMS Providers are the front line practitioners of resuscitation for out of hospital cardiac arrest. Many trends come and go but high quality BLS principles with adjunctive ALS care are mainstays. This class will examine all things resuscitation while applying an evidence based approach to developing your resuscitation program.

Objectives:
1.) Recall the epidemiology of out of hospital arrest
2.) Determine the origins of cardiac resuscitation
3.) Recognize the past practices of resuscitation
4.) List the new (2015) guidelines for ECC provided by the American Heart Association
5.) Summarize the literature and data surrounding the use of:
   - Automated CPR
   - Induced Hypothermia
   - Impedance Threshold Device (ITD)
   - Airway Management
6.) Determine potential future recommendations for management of cardiac arrest

1:30 p.m. Transfer to next session

1:40 p.m.

**Kinematics of Trauma**

Heather Davis, EdD, NRP

If you reach the patient’s side and do not know from how far they fell or if the steering wheel is bent, you are already behind the eight-ball in trauma patient assessment! Sound serious? The forces involved in traumatic injuries are serious, and often the single biggest determinate of outcome for these patients. Students in this session will learn about the deadly forces involved in trauma and how to predict injuries before they are noticeable for major trauma patients.

Objectives:
1.) Integrate anatomy and physiology to the pathophysiology of trauma
2.) Utilize anatomy to determine the injury most likely to be lethal to specific trauma patients
3.) Predict the injury pattern most likely associated with specific mechanisms of injury
It’s A Jungle Out There: Understanding the Concept of Good History Taking
Terry Sudrla, EMS Educator

The ability to properly assess a patient is one of the most important skills you can master. As a pre-hospital provider at any level, you must learn to work quickly and efficiently in all types of situations. To work efficiently, you must approach assessment systemically. The emergency care you provide to your patient will be based on your history and assessment findings.

Objectives:
1.) Describe the individualized approach for successful patient care based on the patient’s values and preferences
2.) Identify the detailed patient history that is the major component of initial assessments
3.) Determine patient care issues using successful obtaining of information
4.) Recall that functional assessment provides a window into a patient’s overall well-being and assists in prioritizing treatment plans

Special Patients, Special Situations
Matthew Fults, NRP, CCP

This course will focus on patient populations not commonly encountered by EMS professionals. Pediatrics, geriatrics, medical devices…EMS providers are called to care for patients with all types of conditions and unique attributes. This course is designed to improve provider comfort with patient situations that are otherwise uncomfortable.

Objectives:
1.) Identify patient populations that are considered “special populations"
2.) Summarize various patient populations encountered in the field that present unique challenges to EMS providers in the practice of pre-hospital medicine
3.) Describe case studies involving special populations, special situations, and uncommonly encountered medical devices

2:40 p.m. Break

3:00 p.m.

LUCAS CPR
Scott Wiebe, NRP, CCP

This presentation will cover information as it relates to effective utilization of the LUCAS Device by EMS and the advanced care opportunities it has provided for patients in cardiac arrest.

Objectives:
1.) Summarize the impact of pauses during manual and mechanical CPR
2.) Summarize advanced applications of LUCAS CPR as a bridge to the cardiac catheterization lab
3.) Clarify the differences between the LUCAS 2 and LUCAS 3 mechanical CPR device
4.) Summarize the effective utilization of the LUCAS device on an actual EMS incident

**Mental Health in EMS: When Providers Become Patients**
*Terry Ragaller, EMT-P*

Much like the patients they care for, EMS providers are not immune to disease, injury or mental health issues. Suicides in EMS providers have spiked as of late in this country and this presentation will discuss the mental health pitfalls of EMS workers. It will also discuss avenues for them to seek assistance.

**Objectives:**
1.) Summarize the history of mental health care in the U.S.
2.) List the common mental health issues seen in EMS
3.) Identify critical stress situations for EMS
4.) List warning signs for stress in patients and EMS providers
5.) Describe how a provider could properly assess a psychiatric emergency
5.) Discuss treatment options for patients and EMS providers

**A Beginner’s Guide to STEMI Imposters**
*Matthew Fults, NRP, CCP*

EMS providers are often called upon to capture and interpret the 12 lead ECG. This course will explore ST segment elevated myocardial infarction and conditions that masquerade as STEMI. When time is of essence it is important to differentiate the STEMI from the imposter.

**Objectives:**
1.) Recognize the “hallmark” presentation and ECG characteristics of STEMI
2.) Differentiate common STEMI mimickers and rules for identification of these mimickers on a 12 lead electrocardiogram
3.) Recall the value of continuing education as it pertains to 12 lead ECG interpretation and provide students resources to broaden their depth knowledge on the subject

4:00 p.m. Transfer to Closing General Session
Closing General Session: How Lack of Sleep is Making Us Stupid, Slow and Dangerous
Heather Davis, EdD, NRP

There are not enough hours in the day! Sleep deprivation is affecting not only our health and performance. It is important for EMS professionals to understand what qualifies as sleep deprivation and how performance and behavior are negatively impacted by sleep disturbances, especially when there are live saving (or life threatening) consequences!

Objectives:
1.) Differentiate the terms sleep deprivation and sleep disturbance
2.) List five dangerous side effects of sleep deprivation
3.) Identify techniques that can assist in the repair of damage done by sleep deprivation
4.) Use patient case studies to identify how patient assessment and treatment is compromised by lack of sleep

Agenda and Objectives

Saturday, February 25

7:00 a.m.  Registration & Sign in, View Exhibits, and Continental Breakfast
7:50 a.m.  Welcome and Announcements
8:00 a.m.

Keynote Address: I’m Having Chest Pain
Loren “Lee” Ridge, EMT, Paramedic

At the conclusion of the program participants should be able to:

Objectives:
1.) Identify risk factors for coronary artery disease
2.) Differentiate chest pain from acute myocardial infarction
3.) Determine patient care and transport decisions

9:00 a.m.  Transfer to next session
Geriatric Trauma  
Loren "Lee" Ridge, EMT, Paramedic

Objectives:
1.) Recall the effects of aging on the body and how they should change the assessment of the elderly trauma patient
2.) List the diseases and medications that can impact geriatric assessment and trauma management
3.) Identify important EMS issues related to communication with geriatric patients

Breathe Easier Knowing Respiratory Pharmacology  
Heather Davis, EdD, NRP

Did you know that allowing a patient to use one of their own inhalers during an asthma attack can actually hurt them? Shortness of breath calls are among the most common, and lethal! Most providers are used to using one or two medications as bronchodilators, but emergency respiratory pharmacology can easily be divided into three mechanisms for optimal treatment. Learn which medications correct specific respiratory pathology and which combinations can be deadly if you don’t know about them. This session has useful, practical information for both EMT’s and Paramedics.

Objectives:
1.) List the three most common pathologies occurring during a shortness of breath call
2.) Summarize why each of the three classes of respiratory medications are used in prehospital medicine compared to one another
3.) Differentiate between mucolytics, antitussives, and expectorants

Initial Assessment and Stabilization of the Pediatric Patient  
Jamee Adams, RN, CPEN

Initial assessment and stabilization of the pediatric patient, assessment tools available, normal behaviors and vital signs for the pediatric patients.

Objectives:
1.) Recognize the importance of rapid and accurate assessment of the pediatric patient
2.) List pediatric assessment tools available
3.) Differentiate between pediatric anatomy and physiology versus adult anatomy and physiology
4.) Summarize initial steps in the stabilization of the pediatric patient

10:10 a.m. Break
EMS is M.A.D. about Opioid Abuse
Jeffrey Messerole, Paramedic, Clinical Instructor

Thought to be an issue only in major U.S. cities or more populated states, use of heroin and other opioids (Hydrocodone, Oxycodone) is quickly becoming a problem of epidemic proportions in more rural areas of the country. Deaths from Opioid abuse now outnumber motor vehicle collisions nationwide.

Objectives:
1.) Describe Opioids and their legitimate need
2.) Recall the Iowa law allowing EMS providers to administer intranasal (IN) Naloxone
3.) Identify common illicit opioids and the signs of abuse
4.) Clarify how and when to administer intranasal (IN) Naloxone
5.) Summarize care after intranasal (IN) Naloxone is given

Trauma Assessment and Management Today
Heather Davis, EdD, NRP

Trauma is still the leading cause of death for young adults and the third leading cause of death in this country for all age groups! EMT and Paramedics are in a position to decrease morbidity and mortality in trauma patients, but only if they can rapidly assess and manage those patients. Did you know that tourniquets are back? And shock position is out? There’s probably more you don’t know.

Objectives:
1.) Carry out an organized, concise assessment of trauma patients
2.) Check assessment findings to the potential for deadly patient conditions
3.) List at least five new axioms related to trauma patient assessment and management

Get Off My Back(board): Select Spinal Immobilization
Terry Ragaller, EMT-P

Spinal immobilization has been a staple of trauma care for nearly 50 years. Invented by a physician with little data and no real scientific basis, this procedure has lived on until the last few years when real science has questioned why. This presentation will discuss the creation and early uses of backboards as well as where we are now and why.

Objectives:
1.) Recall the history of spinal immobilization in the U.S.
2.) Describe early spinal immobilization protocols and equipment
3.) List the current trends in spinal immobilization
4.) Use the current Iowa Select Spinal Immobilization protocol

11:30 am Lunch

12:30 p.m.

**Riding the Wave - EtCO2 Monitoring**
*Jeffrey Messerole, Paramedic, Clinical Instructor*

Long ago, Greek philosophers believed we had tiny internal combustion engines inside our bodies that produced “smoke”, or capnos. It turns out, the Greeks were correct. With the advancement of CO2 monitors either standalone or part of cardiac monitor, we now have the ability to measure this “smoke” which we now know is CO2. Attend the presentation to find out what these numbers and waveforms tell us about our patient.

Objectives:
1.) Identify normal and abnormal EtCO2 waveforms
2.) Determine based on numerical values and EtCO2 waveforms the patient’s condition
3.) Describe treatment options to normalize EtCO2
4.) Utilize these principles and learning in patient case scenarios

**Stuff You Used to Know**
*Heather Davis, EdD, NRP*

Can you define pulsus paradoxus? How about Cushing’s triad? Brudzinski’s sign? The Parkland burn formula? This is an interactive session where participants answer questions about commonly forgotten information. This session will review concepts taught in class, and even used in the field, but not always remembered readily. Attendees will leave saying, “Oh Yeah!” and “I forgot about that!”

Objectives:
1.) Identify and define at least three clinical terms that are commonly forgotten
2.) List at least three clinical conditions of low frequency but high criticality
3.) Recognize the importance of continuous education as a professional EMS provider

**Air Medical Transport: Landing Zone Preparation and Safety**
*Tammy Apana, RN*

Objectives:
1.) Determine air medical landing zone set-up
2.) Summarize principles of air medical landing zone safety and safe patient loading

1:30 p.m. Transfer to next session
The Pressure is On – CHF and the Use of CPAP  
Jeffrey Messerole, Paramedic, Clinical Instructor

Imagine a scenario where your patient is starving for oxygen and his eyes are saying “Please don’t let me die.” You can hardly hear any air exchange in the man’s lungs. Time is running out—what can you do that allows this patient to avoid a dangerous and costly trip to ICU on a ventilator? Attend the session to see how application of CPAP may just do that.

Objectives:
1.) Recall the diagnosis and treatment of CHF and the use of CPAP  
2.) Describe the pathophysiology of respiratory failure  
3.) Identify the indications, contraindications, and side effects for CPAP  
4.) List potential benefits of CPAP for a variety of conditions causing shortness of breath  
5.) Describe common types of CPAP devices

How to Run a Scenario Exam for EMS Continuing Education at the Local Level  
Heather Davis, EdD, NRP

We all agree that we should skills test EMS providers like they are actually required to perform on the job. Enter the Scenario-Based Practical Exam. Come hear what others have done and learn from the mistakes and best practices so that at your local level you can begin offering continuing education this way.

Objectives:
1.) Identify why the nation is transitioning from discrete skill testing to scenario-based testing  
2.) Determine the type of scenarios, difficulty level, and crew configuration best suited for testing  
3.) Create a matrix for rotations, timing and resources needed during scenario-based testing

Sepsis: A Silent Killer – Prehospital Recognition and Treatment  
Aaron Bobier, NRP

Learn about the causes, signs and symptoms, EMS treatments and management of septic shock.

Objectives:
1.) Describe the causes of sepsis  
2.) Recognize the warning signs of sepsis
3.) List the clinical signs of sepsis
4.) Differentiate trends of sepsis care, treatment and management

2:40 p.m. Break

3:00 p.m.

Closing General Session: Do You See What I See?
Loren “Lee” Ridge, EMT, Paramedic

Objectives:
1.) Identify the components of the patient assessment
2.) Differentiate various ways to look at patient conditions
3.) Recognize the importance of patient information provided by patients, not our preconceived information
4.) Assemble patient care plans based upon the patient’s presentation

Conference Information

Cost: $130 BOTH days, Friday and Saturday: $80
       $80 Friday only, Feb. 24 / $80 Saturday only, Feb. 25

Register online at:  [www.unitypoint.org/professional-education](http://www.unitypoint.org/professional-education)

Registration: The program fee covers the cost of course materials, faculty expenses, breaks, lunch and continuing education credit. Registration is complete when credit card or check payment is received. If an individual or organization is paying by check, please include a list of attendee names with the mailed check payment. Checks should be made payable to “UnityPoint Health – St. Luke’s” and mailed to:

UnityPoint Health- St. Luke’s
Dept. of Education
2720 Stone Park Blvd.
Sioux City, IA 51104

Cancellations/Refunds/Transfers: Cancellations must be received by noon February 10, 2017 and will be charged a cancellation fee of $20. Refunds will not be made after this date. If you are unable to attend the conference, your registration may be transferred to another individual. Please call St. Luke’s Dept. of Education at (712) 279-8941 to make the transfer.

Parking is free in the Sioux City Convention Center lots. Additional parking is available in the city parking ramps for a fee of $4.75 on Friday only.
General Information:
• For questions about this conference, contact St. Luke’s Dept. of Education at: naomi.holtz@unitypoint.org or call (712) 279-8941. Parking is free in the Sioux City Convention Center lots. Additional parking is available in the city parking ramps for a fee of $4.75 on Friday only.

• Dress in layers, as individual preferences vary and room temperatures fluctuate.
• Individuals with disabilities are encouraged to participate in our programs. If you have a special need please notify us how we can serve you by calling (712) 279-8941 at least two weeks in advance of the program. UnityPoint Health- St. Luke’s does not discriminate in its educational programs on the basis of race, national or ethnic origin, color, creed, religion, sex, age, disability, veteran status or political affiliation.
• The Emergency Conference 2017 planning committee reserves the right to cancel the conference. If cancellation is necessary, registrants will be notified by email or phone. Cancellation due to inclement weather will be announced over radio and television. A full refund will be made if the Emergency Conference 2017 committee cancels this conference.

Accreditation: No partial credit will be awarded
• Upon completion of the program each nurse will be granted contact hours by UnityPoint Health – St. Luke’s. St. Luke’s is approved by the Iowa Board of Nursing as a provider of continuing education credit for nurses. Iowa Provider #40.
• All EMS personnel will be granted continuing education hours by Western Iowa Tech Community College, under the guidelines of the Iowa Dept. of Public Health/EMS (CEH’s).

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<td>Friday, Feb. 24</td>
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<td>Saturday, Feb. 25</td>
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Hotel Accommodations: Blocks of rooms will be held for this conference until Feb.1. Mention the “EMS Conference 2017” to get the listed rate when making reservations.

• **Stoney Creek Inn:**
  (712) 234-1100
  $95-Feb. 23 and $109-Feb. 24

• **Hard Rock Casino & Hotel:**
  (712)226-7625
  $169-Feb 23; $199-Feb. 24

• **Marina Inn:**(402)-494-4000;
  $92
• Holiday Inn: (712)-277-9400; $82.50
• Hampton Inn & Suites: (712)-587-6984; $99
• Fairfield Inn: 712-276-5600; $80