

Can You Make the Diagnosis?



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You are dispatched to a MVC with injuries. While en route, the call was upgraded to an accident with extrication. The patient is a young male trapped in a car that struck a semi-truck head

on at a high rate of speed, with heavy front end damage, upright on the shoulder of the road with the engine a football field away from the car. The patient is awake, alert, oriented appropriately, seatbelt restrained with airbag deployment. The windshield was shattered and the patient's legs appeared to be trapped underneath the dashboard with the complaint of massive leg pain. The nearest trauma center, a Level II is 15 minutes away by ground. A Level I Trauma Center by HEMS would be a 10 minute flight. Because of provider index of suspicion, condition of the vehicle, and delayed patient access with prolonged extrication, on line medical control was contacted requesting a helicopter with approval provided.

Ground transportation is used by the majority of EMS (GEMS) crews to move trauma patients to definitive care. The mantra of "get the right patient to the right place in the right time" has not changed. Given that, there are certain situations where EMS air transport, either helicopter emergency medical services (HEMS) or fixed-wing transport of trauma patients may be preferred. Helicopters can land in more severe, remote environments compared to fixed wing aircraft, but are limited by distance and inclement weather. HEMS, depending on the agency, has various crew make-up and credentialing, training, protocols and scope of practice which can offer advantages to critical trauma patients. The current position statement from NAEMSP for appropriate air medical service utilization and recommendations, April 2021, state there is patient benefit gained from the clinical care capabilities of air medical services independent of the potential time saved with transport. Utilization, however, must take into account clinical and safety considerations as well system integration. HEMS has shown improved mortality benefit in select critically ill trauma patients, up to 15%. Extracting data from the National Trauma Data Bank regarding penetrating trauma patients, HEMS had a 6% reduction in mortality compared to ground transport for transport times of 31-60 minutes. This mortality benefit when using HEMS for longer transports may be related to a faster scene to hospital transport, and providers who have greater critical care experience and training. As a point of emphasis, there was no significant mortality benefit for penetrating trauma patients between GEMS and HEMS if the transport time to

a trauma center was less than 30 minutes. Therefore, in regards to trauma center transport times <30 minutes, EMS must take into consideration the time required for preflight safety checks and crew mobilization, as well as limited launch points when requesting HEMS deployment.

The Air Medical Prehospital Triage Criteria Score studies found trauma patients with two or more of the following physiologic and anatomic criteria may benefit from HEMS transport: GCS <14, RR <10 or >29, flail chest, hemo/pneumothorax, paralysis, and multisystem trauma. It should be noted, however, these patients had improved survival independent of whether air transport shortened the time to a trauma center suggesting critical care management skills ultimately play a more important role than transport modality.

Comparing HEMS to fixed-wing aircraft, the mortality benefit occurs with transport of patients greater than 100 miles, most likely related to speed, ability to carry a greater number of medical staff and equipment, and the capacity to fly in adverse weather. (1)

In summary, the clinical considerations for HEMS should include if these services provide initiation or continued advanced/specialty care not available locally from the hospital or GEMS for time-sensitive situations and/or "extraction, evacuation, and/or rescue from environments that are difficult to access due to geography, weather, remote location, distance, and other factors that limit timely access to a patient or transport by ground EMS." (2) Additionally, risk

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assessment both to the patient and crew must be evaluated and weighed regarding patient benefit. "Auto-launch" practice to quickly mobilize HEMS can provide medical benefit but may also result in over-use and should have continuous quality assessment for appropriateness and indication. "Helicopter shopping", which involves making calls to multiple agencies to secure air transport after an initial service declined a flight due to safety concerns, should not be practiced as well as "reverse helicopter

shopping", which is where agencies seek out and offer to perform transport missions declined by other services for safety reasons.

Ultimately, multiple considerations must be utilized to consider HEMS as outlined above, but your system involvement in the decision should be a priority.



Please join ITLS International at the 2023 International Trauma Conference in Houston, TX, on November 2-5, at the Westin Galleria. Catch up with old friends and make new connections at a program that celebrates the diversity of trauma care worldwide! The conference brochure with the full agenda of educational sessions will come soon. Here is a short list to peak your interest! We hope to see you there.

Opening Keynote Address:

- Traumatic Cardiac Arrest presented by Bryan Bledsoe, DO, FACEP, FAEMS.

- The Lethal Trauma Diamond: Coagulopathy, Hypothermia, Acidosis, Hypocalcemia by Justin Milici, MSN, RN, CEN, CPEN, CPN, TCRN, CCRN, FAEN
- Acute Burn Care by John A. Harvin, MD, MS, FACS
- Sport Trauma: From Football to Marathon by Marc-Antoine Doré M.Sc, CAT(C)

Preconference courses:

Information of preconference courses and registration online will be available soon. Continue to check back at [itrauma.org/conference](https://www.itrauma.org/conference) for all the details.

References

1. Springer, BL, et al: EMS Trauma Stabilization and Transport: A Comprehensive Review. Trauma Reports Jan/Feb 2023.
2. Lyng, JW, et al: Appropriate Air Medical Services Utilization and Recommendations for Integration of Air Medical Services Resources into the EMS System of Care: A Joint Position Statement and resource Document of NAEMSP, ACEP, and AMPA. Prehospital Emergency Care 25:6 November/December 2021.

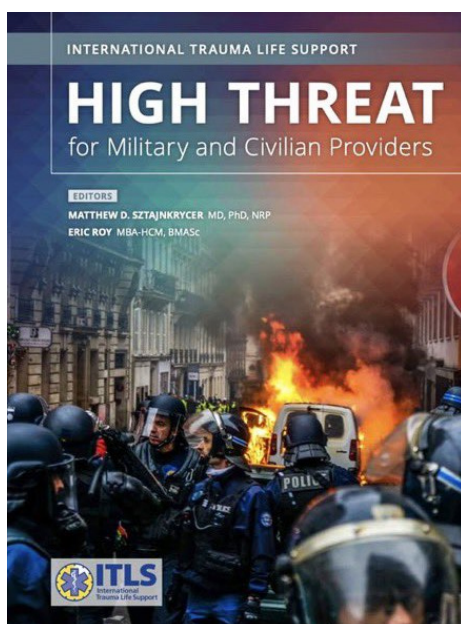
ITLS 9th Edition eTrauma

Pearson Education released the ITLS 9th edition etrauma course in September 2022. The ITLS etrauma courses is 8 hours of on-line education comprised of 18 interactive lessons that correspond to textbook chapters. Each lesson is followed by a quiz. The course can be used for continuing education or as the first step in achieving ITLS Basic or Advanced Provider Certification. For complete details and the link to purchase from Pearson go to the ITLS website: <https://www.itrauma.org/education/itls-etrauma/>

There are two digital purchase options in the U.S.

- Course Access Code only
Cost: \$77.00
ISBN-13: 9780137982967
- Course Access Code with 9th edition etext
Cost: \$106.99
ISBN-13: 9780137983001

The etrauma course online is available for completion for one year from the student's first date of access. It provides 8.00 Continuing Education Hours accredited by CAPCE.



The ITLS High Threat for Military and Civilian Providers course is now available!

ITLS High Threat maintains the core concepts and evidence-based ethos of ITLS. In high threat environments, providers must recognize that during conditions of active threat, priorities of care may change and medical care may become simply another tactical decision.

ITLS High Threat, based upon current CoTCCC and CTECC guidelines, has been developed to save lives both while under immediate threat and once the threat has been mitigated.

Course Information:

The ITLS High Threat for Military and Civilian Providers Course is a two-day (16 hours) practical trauma management course designed for prehospital care providers operating within conflict zones or other high-threat environments. The course has been designed to meet the military Committee on Tactical Combat Casualty Care (CoTCCC) and civilian Committee on Tactical Emergency Casualty Care (C-TECC) provider guidelines and curriculum. Using adult learning principles, scenarios, skill stations, and peer-focused learning, the

ITLS High Threat for Military and Civilian Providers course provides the necessary training for operations and the provision of advanced life-saving care in the high-threat environment.

The course focuses on initial patient evaluation and critical interventions required to manage patients in non-permissive and semi-permissive environments and to prepare for evacuation to permissive environments. Students are introduced to a TCCC/TECC-compliant high-threat algorithm and provided with the necessary training to incorporate basic tactics to ensure that care is appropriate for the threat level of the situation. Course modules highlight scene considerations, rapid patient assessment using the MARCH algorithm, delayed transport care, patient reassessment, mass casualty triage, and communications.

ITLS High Threat Instructor Training:

The ITLS High Threat Instructor online course is now available for current ITLS instructors or those with equivalent certification. To review the details of the High Threat Instructor requirements and to ensure you are eligible to take the course and teach, go to: https://www.itrauma.org/wp-content/uploads/2023/05/High-Threat-Instructor-Teaching-Criteria_.pdf

The HT Instructor online course cost is \$42.00. To purchase and receive immediate access go to: <https://learn.itrauma.org/product?catalog=ITLS-HighThreat-Online-Course>

The course certificate of completion is to be downloaded at the end of the course and provided by email to the ITLS Illinois chapter coordinator, Sue McDonough, at suem@icep.org. The Illinois chapter will issue the High Threat Instructor certification card with the 2.00 hours of Continuing Education accredited by CAPCE.

ITLS High Threat Instructor Materials:

ITLS High Threat instructor materials will be sent by the chapter coordinator to approved instructors when sending their ITLS High Threat Instructor certification card. The materials include PPT teaching slides and Instructor guide and are provided at no cost. The High Threat written exam and trauma lane patient exams will be provided to course coordinators only for use in hard copy at the courses.

ITLS High Threat for Military and Civilian Providers Manual

ISBN # 978-0-9647418-7-4

Illinois Chapter Price: \$49

How to Order:

Orders can be placed by emailing bookstore@icep.org to automatically receive the Illinois discounted price offered by ICEP. Illinois state tax and shipping costs will be added. Training sites with tax-exempt status should indicate that when placing their order(s).

Orders should include a ship to address and billing address if different. ITLS training sites can be invoiced with payment due in 30 days. Individuals are required to prepay with a credit card or check with the order shipping after payment has been received.

Contact Sue McDonough with questions about the course or ordering manuals at suem@icep.org.

Highlights of ITLS 2022 Trauma Conference in Tampa, Florida

The November 2022 ITLS International business meeting and International Trauma Conference were held in-person after two years of virtual meetings. Over 150 attendees from 13 countries came together in Tampa to share experiences.

ITLS also launched the High Threat manual and conducted a developmental Instructor course at the conference to facilitate the roll-out. This course will replace the ITLS Military course and manual. ITLS encourages all chapters and training centers to adopt the course for their providers. More information can be found on page 3.

ITLS Illinois is always well represented at the annual conference. There were nine coordinators and instructors in attendance. Serving as voting delegates for the chapter were: Tony Cellitti, Mike Dant, Darren Davis, Karyn Eisemann, Jay Johns, Ed Kemnitz and Sue McDonough.

ICEP and ITLS International Updates

The Illinois College of Emergency Physicians appointed Bailey McMurray, IOM, MAOL, as the new Executive Director of ICEP and ITLS in September 2022. Bailey will be involved on the ITLS Illinois Advisory Committee. Welcome, Bailey!

Last year, Ginny Kennedy Palys, Executive Director of ITLS and ICEP for 37 years, retired from this role and will be spending quality time in her new home with her family. ITLS recognized her long service and dedication to ITLS at the conference and named the ITLS Ambassador Award in her name. It will now be known as the Ginny Kennedy Palys Ambassador Award. Ginny also received the Donna Hastings Leadership Award during the business meeting.

The Illinois College of Emergency Physicians, the sponsor of the ITLS Illinois chapter, also honored Ginny at the May 2022



Among those representing Illinois at the 2022 conference were: (Front Row, Left to Right) Jayne Dant, Mike Dant, Jeanie Debolt, Karyn Eisemann (Top Row, Left to Right) Jeremy Hafliger, Ed Kemnitz, Tony Cellitti, Sue McDonough, Darren Davis

ICEP Spring Symposium and named their annual meeting the Ginny Kennedy Palys Annual Symposium. The meeting will be held this year on May 25th.

innovative ways to deliver our educational programs.

In 2022-2023, ITLS International welcomed six new ITLS chapters:

- Angola - Angolan Armed Forces Medical Training
- Denmark - U/NORD Ambulance & Pre-hospital Education
- Hong Kong - Hong Kong Institute of Paramedicine (HKIPARA)
- Italy - CFS Servizi
- Portugal - ESSCVP-Lisbon
- Tanzania - Emergency Medical Services Academy(EMSA)

As ITLS looks forward to 2023, the Editorial Board has started work on the next ITLS text for Advanced and Basic providers. The Editorial Board has been busy reviewing the latest evidence in trauma management to help us to stay up to date with new science and continues to look at new and

The Illinois College of Emergency Physicians and International Trauma Life Support acknowledge the important role of EMS professionals in our country. We celebrate WHERE EMERGENCY CARE BEGINS and those individuals who help their communities 24/7/365. We support the EMS Week campaign because we believe in educating the public and stakeholders about prehospital medicine and the services provided by EMS. And there's no better time to honor the accomplishments of EMS professionals than during EMS Week. We are grateful to those who serve and help to promote ca-

maraderie among every EMS team in every community nationwide. We hope you'll reserve some time during this special week to gather with your team to celebrate your excellent work and the many lives you have touched or saved!

Produced by the American College of American Physicians (ACEP), in partnership with the National Association of Emergency Medical Technicians (NAEMT), national EMS WEEK is designed to celebrate, unite, and inspire the men and women of EMS 365 days a year. Learn more about the

campaign which includes videos and information to share during EMS Week at: <https://emsweek.org/about-ems-week/>



EMS WEEK

Where **Emergency Care** Begins
May 21-27, 2023



emsweek.org



Congratulations to New Affiliate Faculty Member

Michael Irrera, EMT-P, Illinois Central College, Peoria, was approved in April 2023 as new Affiliate Faculty.

Contact Sue McDonough at suem@icep.org if you are interested in applying or submitting a nomination.

2023 ITLS Illinois Advisory Committee Meetings Set for September 13 and December 1

There are two meetings of the ITLS Illinois Advisory Committee remaining in 2023 to be held September 13 and December 1. Both meetings will be held from 10:00 am to 11:30 am via Zoom for videoconference

or audioconference participation.

In-person meetings and locations will be announced closer to the meeting dates. As a reminder, all Affiliate Faculty are required to attend one meeting every 2 years; videoconference or audioconference meets the attendance requirement.

Attendance at additional meetings is optional but appreciated!

To see this and previous newsletters go to the ITLS Illinois website: icep.org/itls-illinois.

Upcoming ITLS Illinois Courses

For the most updated list of upcoming courses in ITLS Illinois, including registration information, please visit <http://cms.itrauma.org/CourseSearch.aspx>. You do not need to log in to access this page. Here are some of the upcoming courses in Illinois:

May 12: Combined Instructor Classroom Component

June 15: Advanced Provider Recertification

June 15-16: Combined Provider Certification

Registration: Dean Buch dbuch@medstarems.net
Medstar Ambulance, Belleville

July 27: Combined Provider Recertification

Registration: Shelley Peelman
shelley.s.peelman@osfhealthcare.org
East Central Illinois EMS, Champaign

August 4: Combined Instructor Certification
Prerequisite is Instructor Online Component Course

Registration: Karyn Eisemann
karyn.eisemann@bjc.org
Memorial Hospital, Belleville

August 17: Advanced Provider Recertification

August 17-18: Advanced Provider Certification

Registration: Dean Buch dbuch@medstarems.net
Medstar Ambulance, Belleville

September 24-25: Combined Provider Certification

Registration: Karyn Eisemann
karyn.eisemann@bjc.org
Memorial Hospital, Belleville

October 10: Combined Provider Recertification

October 14-15: Combined Provider Certification

Registration: Mike Schwenke
mschwenke@sblhs.org
Sarah Bush Lincoln -EMS, Mattoon

October 19: Advanced Provider Recertification

October 19-20: Advanced Provider Certification

Registration: Dean Buch
dbuch@medstarems.net
Medstar Ambulance, Belleville

October 26: Combined Provider Recertification

Registration: Shelley Peelman
shelley.s.peelman@osfhealthcare.org
East Central Illinois EMS, Champaign

December 21: Advanced Provider Recertification

December 21-22: Advanced Provider Certification

Registration: Dean Buch dbuch@medstarems.net
Medstar Ambulance, Belleville