

# JTACS SEPTEMBER TABLE OF CONTENTS

## 'BEST OF' SEPTEMBER ARTICLES

BEST OF TRAUMA ARTICLE

**After 9,000 Laparotomies For Blunt Trauma, Resuscitation Is Becoming More Balanced And Time To Intervention Shorter: Evidence in Action**

Adult Blunt Trauma Patients

N = 9,773

ACS Trauma Quality Improvement Program (2013-2017)

Early (<4hrs) Emergent Ex-Lap

Early (<4hrs) PRBC & FFP Tx

Hierarchical Regression Analysis:

- Demographics • Injury Parameters
- ACS Center • Transfusion Verification
- Volumes

Over 5-yr study period

PRBC:FFP Ratio (1.93 to 1.71)

Time to Ex-Lap (1.87 to 1.37 hrs)

24-hr & In-hospital Mortality

PRBC:FFP Ratio ∝ Mortality

Douglas et al. *Journal of Trauma and Acute Care Surgery*, September 2022

@JTraumaAcuteSurg

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The Journal of Trauma and Acute Care Surgery

**AFTER 9,000 LAPAROTOMIES FOR BLUNT TRAUMA, RESUSCITATION IS BECOMING MORE BALANCED AND TIME TO INTERVENTION SHORTER: EVIDENCE IN ACTION**

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/AF-TER\\_9\\_000\\_LAPAROTOMIES\\_FOR\\_BLUNT\\_TRAUMA,.4.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/AF-TER_9_000_LAPAROTOMIES_FOR_BLUNT_TRAUMA,.4.ASPX)



SCAN HERE TO VIEW A VIDEO  
OVERVIEW OF THE ARTICLE

<https://qr.page/g/1672cqtNs7r>

**Association of Trauma Severity with Antibody Seroconversion in Heparin-induced Thrombocytopenia: A Multicenter, Prospective Observational Study**

TRAUMA + HIT

Is HIT a rare condition in trauma patients?  
Is there a relationship between trauma severity and HIT antibody seroconversion?  
Is heparin use essential for HIT antibody seroconversion?

The seroconversion rates of HIT antibodies by washed platelet activation assay was **16.3%**.

Seroconversion rates increased with trauma severity.

The time to seroconversion was similar regardless of heparin administration.

HIT antibodies were **no longer detected on day 30** in 60.9% of seroconverted patients.

Development of HIT antibodies was observed commonly in severely injured trauma patients. HIT antibody development may be related to trauma severity, with a high disappearance rate on day 30.

Heparin + PF4 complex

PF4 HIT Ab

age ≥18 years  
ISS ≥9

184 cases were divided into 3 groups  
ISS 9-15, 16-24, 25 or more

Seroconversion time and rate  
Disappearance rate of antibodies on day 30

M. Fujita, T. Maeda, S. Miyata, S. Kushimoto et al.  
*Journal of Trauma and Acute Care Surgery*, 12.2021

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The Journal of Trauma and Acute Care Surgery

**ASSOCIATION OF TRAUMA SEVERITY WITH ANTIBODY SEROCONVERSION IN HEPARIN-INDUCED THROMBOCYTOPENIA: A MULTICENTER, PROSPECTIVE OBSERVATIONAL STUDY**

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/FULLTEXT/2022/09000/ASSOCIATION\\_OF\\_TRAUMA\\_SEVERITY\\_WITH\\_ANTIBODY.16.ASPX](https://journals.lww.com/jtrauma/fulltext/2022/09000/ASSOCIATION_OF_TRAUMA_SEVERITY_WITH_ANTIBODY.16.ASPX)



SCAN HERE TO VIEW A VIDEO  
OVERVIEW OF THE ARTICLE

<https://qr.page/g/2WmKcwK74s>

## BEST OF EGS ARTICLE

**The Physiology of Failure: Identifying Risk Factors for Mortality in EGS Patients Using a Regional Health System Integrated EMR**

Billing data + EMR 2013-2018

9 hospital health system

Patients with AAST EGS diagnoses

Administrative & clinical variables merged

Factors Associated with Higher Mortality

Inpatient

Age WBC Lactate Ventilator requirement

One-year

Age Heart rate Lactate

WBC BMI

Conclusion

Clinical datapoints need to be included in EGS mortality assessments which **may** help with:

- Timely recognition
- Correcting reducible risk factors
- Earlier surgical intervention or transfer to higher level of care

Balmas-George M, et al. *Journal of Trauma and Acute Care Surgery*, 12.2021

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The Journal of Trauma and Acute Care Surgery

**THE PHYSIOLOGY OF FAILURE: IDENTIFYING RISK FACTORS FOR MORTALITY IN EMERGENCY GENERAL SURGERY PATIENTS USING A REGIONAL HEALTH SYSTEM INTEGRATED ELECTRONIC MEDICAL RECORD**

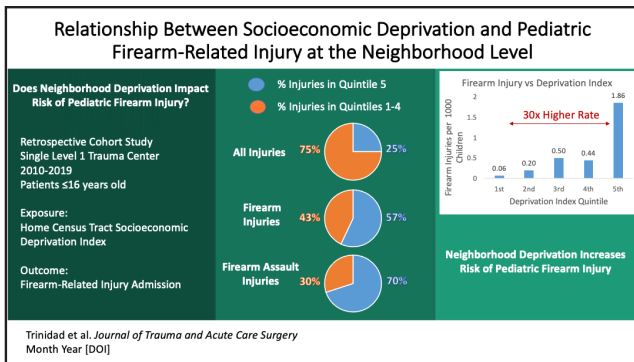
[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/THE\\_PHYSIOLOGY\\_OF\\_FAILURE\\_IDENTIFYING\\_RISK.17.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/THE_PHYSIOLOGY_OF_FAILURE_IDENTIFYING_RISK.17.ASPX)



SCAN HERE TO VIEW A VIDEO  
OVERVIEW OF THE ARTICLE

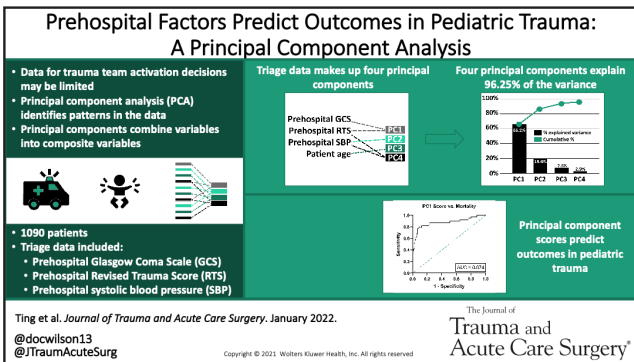
<https://qr.page/g/3alOdwPYgcC>

BEST OF SCC ARTICLE



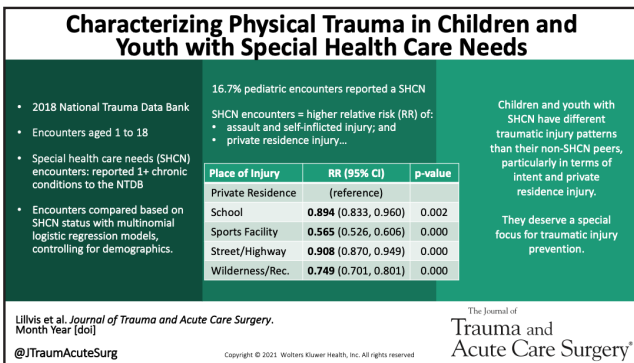
## RELATIONSHIPS BETWEEN SOCIOECONOMIC DEPRIVATION AND PEDIATRIC FIREARM-RELATED INJURY

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/RELATIONSHIPS\\_BETWEEN\\_SOCIOECONOMIC\\_DEPRIVATION.1.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/relationships_between_socioeconomic_deprivation.1.aspx)



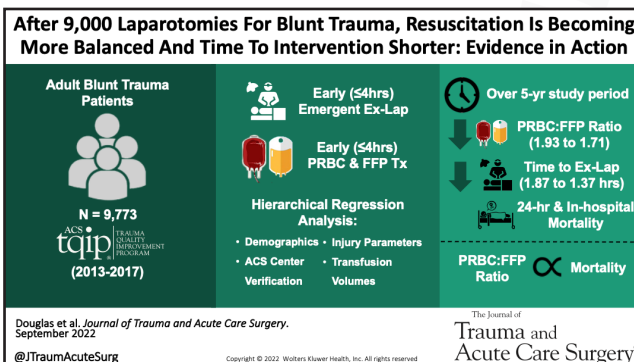
## PREHOSPITAL FACTORS PREDICT OUTCOMES IN PEDIATRIC TRAUMA: A PRINCIPAL COMPONENT ANALYSIS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/PREHOSPITAL\\_FACTORS\\_PREDICT\\_OUTCOMES\\_IN\\_PEDIATRIC\\_TRAUMA.2.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/prehospital_factors_predict_outcomes_in_pediatric_trauma.2.aspx)



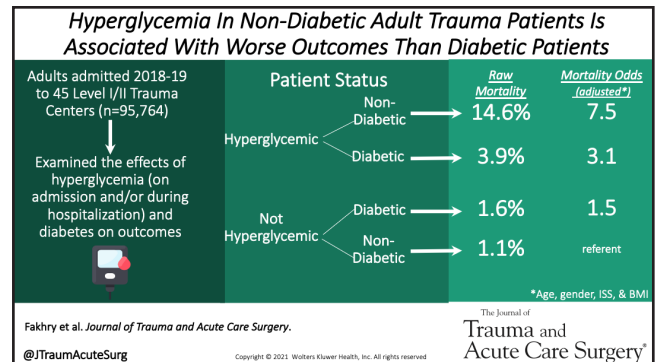
## CHARACTERIZING PHYSICAL TRAUMA IN CHILDREN AND YOUTH WITH SPECIAL HEALTH CARE NEEDS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/CHARACTERIZING\\_PHYSICAL\\_TRAUMA\\_IN\\_CHILDREN\\_AND\\_YOUTH.3.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/characterizing_physical_trauma_in_children_and_youth.3.aspx)



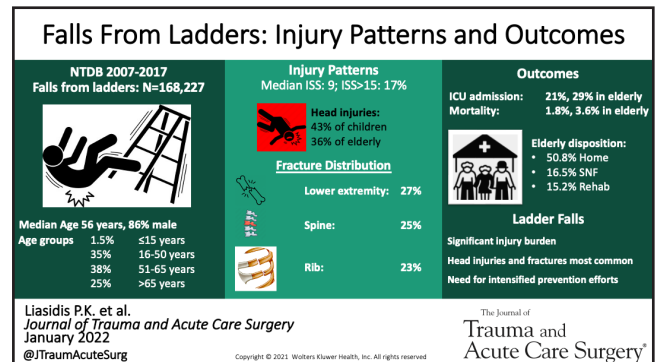
## AFTER 9,000 LAPAROTOMIES FOR BLUNT TRAUMA, RESUSCITATION IS BECOMING MORE BALANCED AND TIME TO INTERVENTION SHORTER: EVIDENCE IN ACTION

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/AFTER\\_9\\_000\\_LAPAROTOMIES\\_FOR\\_BLUNT\\_TRAUMA.4.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/after_9_000_laparotomies_for_blunt_trauma.4.aspx)



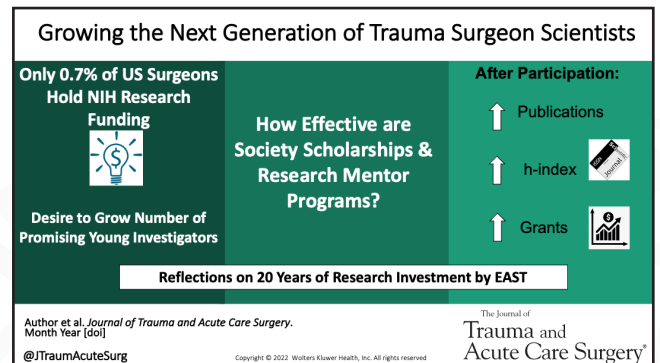
## HYPERGLYCEMIA IN NON-DIABETIC ADULT TRAUMA PATIENTS IS ASSOCIATED WITH WORSE OUTCOMES THAN DIABETIC PATIENTS: AN ANALYSIS OF 95,764 PATIENTS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/HYPERGLYCEMIA\\_IN\\_NONDIABETIC\\_ADULT\\_TRAUMA\\_PATIENTS.5.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/hyperglycemia_in_nondiabetic_adult_trauma_patients.5.aspx)



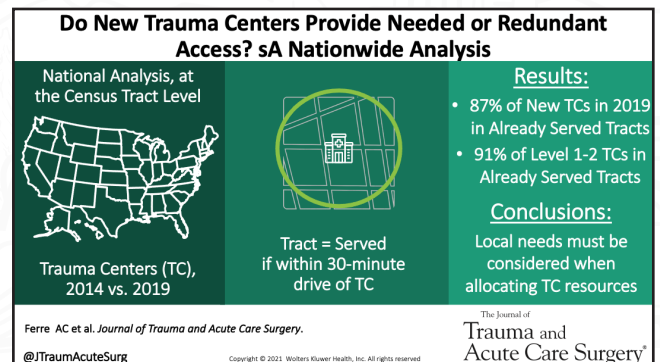
## FALLS FROM LADDERS: INJURY PATTERNS AND OUTCOMES BEYOND PAIN AND DISABILITY: THE LASTING EFFECTS OF TRAUMA ON LIFE AFTER INJURY

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/FALLS\\_FROM\\_LADDERS\\_INJURY\\_PATTERNS\\_AND\\_OUTCOMES.6.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/falls_from_ladders_injury_patterns_and_outcomes.6.aspx)



## GROWING THE NEXT GENERATION OF TRAUMA SURGEON SCIENTISTS – REFLECTIONS ON 20 YEARS OF RESEARCH INVESTMENT

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/GROWING\\_THE\\_NEXT\\_GENERATION\\_OF\\_TRAUMA\\_SURGEON\\_SCIENTISTS.8.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/growing_the_next_generation_of_trauma_surgeon_scientists.8.aspx)



## DO NEW TRAUMA CENTERS PROVIDE NEEDED OR REDUNDANT ACCESS? AN OBSERVATIONAL NATIONWIDE ANALYSIS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/DO\\_NEW\\_TRAUMA\\_CENTERS\\_PROVIDE\\_NEEDED\\_OR\\_REDUNDANT\\_ACCESS.9.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/do_new_trauma_centers_provide_needed_or_redundant_access.9.aspx)

**Trauma Bay Virtual Reality**  
A Game-Changer for ATLS Instruction and Assessment

| Traditional ATLS                                                                                                                            | Trauma Bay Virtual Reality                                                                                                                                                                     | Trauma Bay VR Differentiates Learner Training and Skill                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Minimal scenario practice opportunities</li> <li>Variable testing delivery and assessment</li> </ul> | <ul style="list-style-type: none"> <li>Independent learner practice</li> <li>Numerous scenarios</li> <li>Real-time performance assessment</li> <li>Standardized testing environment</li> </ul> | <ul style="list-style-type: none"> <li>Measures time and accuracy in decision-making</li> </ul> |

Colonna et al. *Journal of Trauma and Acute Care Surgery*.  
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### TRAUMA BAY VIRTUAL REALITY - A GAME CHANGER FOR ATLS INSTRUCTION AND ASSESSMENT

[https://journals.lww.com/jtrauma/abstract/2022/09000/Trauma\\_Bay\\_Virtual\\_Reality\\_A\\_Game\\_Changer\\_for\\_ATLS.10.aspx](https://journals.lww.com/jtrauma/abstract/2022/09000/Trauma_Bay_Virtual_Reality_A_Game_Changer_for_ATLS.10.aspx)

**Individual and Neighborhood Level Characteristics of Pediatric Firearm Injuries Presenting at Trauma Centers in Colorado**

| 4 Trauma Centers (2008-2019)                                                                                                                                | 14% Increase in Firearm Injuries Per Year | Socially Vulnerable Neighborhoods at Greatest Risk                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>446 Firearm Injuries</li> <li>Median Age: 16 years</li> <li>87% Male</li> <li>92% from Metropolitan Areas</li> </ul> |                                           | <ul style="list-style-type: none"> <li>Poverty Levels and Proportions of Minority Race Residents</li> <li>Median Household Income and % College Graduates</li> </ul> |

Stevens J, et al. *Journal of Trauma and Acute Care Surgery*.  
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### INDIVIDUAL AND NEIGHBORHOOD LEVEL CHARACTERISTICS OF PEDIATRIC FIREARM INJURIES PRESENTING AT TRAUMA CENTERS IN COLORADO

[https://journals.lww.com/jtrauma/abstract/2022/09000/Individual\\_and\\_Neighborhood\\_Level\\_Characteristics\\_of\\_Pediatric\\_Firearm\\_Injuries\\_Presenting\\_at\\_Trauma\\_Centers\\_in\\_Colorado.14.aspx](https://journals.lww.com/jtrauma/abstract/2022/09000/Individual_and_Neighborhood_Level_Characteristics_of_Pediatric_Firearm_Injuries_Presenting_at_Trauma_Centers_in_Colorado.14.aspx)

**Developing a National Trauma Research Action Plan (NTRAP): Results from the Pediatric Trauma Delphi Survey**

| METHODS                                                                                                                                                                                    | RESULTS                                                                                                                                                                                                       | CONCLUSION                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <p>Experts in pediatric trauma care and research identified gaps in knowledge, generated research questions and prioritized questions using a consensus-driven Delphi survey approach.</p> | <p>Subject matter experts generated 625 research questions. 493 questions (79%) reached a consensus level of 60% agreement: 159 (32%) were High Priority, 325 (86%) Medium Priority, 9 (2%) Low Priority.</p> | <p>Research questions addressing traumatic brain injury and shock were rated highest in priority.</p> |

Jonathan L. Grier, MD, FACS, Edward Skogger, MD, Jimmy Phuong, PhD, Maxwell A. Braverman, DO, Emma Reddy, MPH, Pamela L. Babu, MA, Stephanie Borne, MD, Kimberly Joseph, MD, Mary Margaret Knudson, MD, Frederick P. Rivara, MD, Ali Roshan-Radbar, MD, MPH, PhD, Sarah N. Smith, MD, MPH, Michelle A. Price, PhD, Ellen M. Rucker, MD, and the NTRAP Injury Prevention Panel. *Journal of Trauma and Acute Care Surgery*. [doi]  
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### DEVELOPING A NATIONAL TRAUMA RESEARCH ACTION PLAN (NTRAP): RESULTS FROM THE PEDIATRIC TRAUMA RESEARCH GAP DELPHI SURVEY

[https://journals.lww.com/jtrauma/abstract/2022/09000/Developing\\_a\\_National\\_Trauma\\_Research\\_Action\\_Plan\\_\(NTRAP\):\\_Results\\_from\\_the\\_Pediatric\\_Trauma\\_Research\\_Gap\\_Delphi\\_Survey.11.aspx](https://journals.lww.com/jtrauma/abstract/2022/09000/Developing_a_National_Trauma_Research_Action_Plan_(NTRAP):_Results_from_the_Pediatric_Trauma_Research_Gap_Delphi_Survey.11.aspx)

**Surgical exploration for stable patients with penetrating cardiac box injuries: when and how?**

| Population                                                                                                                                                                                                                                                                                                                                                                                                                                                | Conclusion                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Retrospective review of Marseilles area (2009-2019)<br/>Multicentric<br/>155 stable patients with PBCI</p> <p><b>Penetrating cardiac box injuries</b><br/>Stable Without cardiac tamponade</p> <p><b>+ Hemopericardium at eFAST</b><br/>30% vs 9.5%, p=0.010<br/>NPV = 93%</p> <p><b>+ Chest tube drainage of Pneumo-hemothorax at eFAST</b><br/>amount 600.0mL vs 300.0mL, p=0.001</p> <p><b>+ VATS</b><br/>n= 35 (42%)<br/>conversion rate = 14%</p> | <p><b>When ?</b></p> <ul style="list-style-type: none"> <li>Pericardial Effusion at eFAST</li> <li>CT &gt; 600mL or major air leaks or massive hemothorax</li> <li>Hemodynamic decompensation</li> </ul> <p><b>How ?</b></p> <ul style="list-style-type: none"> <li>Anterior VATS approach</li> </ul> |

M. Vasse et al. *Journal of Trauma and Acute Care Surgery*.  
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### SURGICAL EXPLORATION FOR STABLE PATIENTS WITH PENETRATING CARDIAC BOX INJURIES: WHEN AND HOW? A COHORT OF 155 PATIENTS FROM MARSEILLE AREA.

[https://journals.lww.com/jtrauma/abstract/2022/09000/Surgical\\_Exploration\\_for\\_Stable\\_Patients\\_with\\_Penetrating\\_Cardiac\\_Box\\_Injuries:\\_When\\_and\\_How?\\_A\\_Cohort\\_of\\_155\\_Patients\\_from\\_Marseille\\_Area.15.aspx](https://journals.lww.com/jtrauma/abstract/2022/09000/Surgical_Exploration_for_Stable_Patients_with_Penetrating_Cardiac_Box_Injuries:_When_and_How?_A_Cohort_of_155_Patients_from_Marseille_Area.15.aspx)

**Developing a National Trauma Research Action Plan (NTRAP): Results from the Injury Prevention Research Gap Delphi Survey**

| METHODS                                                                                                                                                                            | RESULTS                                                                                                                                                                                                              | CONCLUSION                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Experts in injury prevention research identified gaps in knowledge, generated research questions and prioritized questions using a consensus-driven Delphi survey approach.</p> | <p>28 subject matter experts generated 394 research questions. 367 questions (93%) reached a consensus level of 60% agreement: 169 (46%) were High Priority, 196 (53%) Medium Priority, and 2 (5%) Low Priority.</p> | <p>The most prevalent topic areas among high priority questions are suicide, firearm violence and violence prevention. NTRAP research priorities are partially aligned with those of the CDC, with the main difference being a greater focus on firearm violence in NTRAP's priorities</p> |

Zara Cooper, MD, MSc, Juan P. Herrera Escobar, MD, MPH, Jimmy Phuong, PhD, Maxwell A. Braverman, DO, Emma Reddy, MPH, Pamela L. Babu, MA, Stephanie Borne, MD, Kimberly Joseph, MD, Mary Margaret Knudson, MD, Frederick P. Rivara, MD, Ali Roshan-Radbar, MD, MPH, PhD, Sarah N. Smith, MD, MPH, Michelle A. Price, PhD, Ellen M. Rucker, MD, and the NTRAP Injury Prevention Panel. *Journal of Trauma and Acute Care Surgery*. [doi]  
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### DEVELOPING A NATIONAL TRAUMA RESEARCH ACTION PLAN (NTRAP): RESULTS FROM THE INJURY PREVENTION RESEARCH GAP DELPHI SURVEY

[https://journals.lww.com/jtrauma/abstract/2022/09000/Developing\\_a\\_National\\_Trauma\\_Research\\_Action\\_Plan\\_\(NTRAP\):\\_Results\\_from\\_the\\_Injury\\_Prevention\\_Research\\_Gap\\_Delphi\\_Survey.12.aspx](https://journals.lww.com/jtrauma/abstract/2022/09000/Developing_a_National_Trauma_Research_Action_Plan_(NTRAP):_Results_from_the_Injury_Prevention_Research_Gap_Delphi_Survey.12.aspx)

**Association of Trauma Severity with Antibody Seroconversion in Heparin-induced Thrombocytopenia: A Multicenter, Prospective Observational Study**

| TRAUMA x HIT                                                                                                                                                                                                                                                                                                                                                                                             | Development of HIT antibodies                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Is HIT a rare condition in trauma patients?</p> <p>Is there a relationship between trauma severity and HIT antibody seroconversion?</p> <p>Is heparin use essential for HIT antibody seroconversion?</p> <p>age ≥18 years<br/>ISS ≥ 9<br/>184 cases were divided into 3 groups<br/>ISS 9-15, 16-24, 25 or more</p> <p>Seroconversion time and rate<br/>Disappearance rate of antibodies on day 30</p> | <p>The seroconversion rates of HIT antibodies by washed platelet activation assay was <b>16.3%</b>.</p> <p>Seroconversion rates increased with trauma severity.</p> <p>The time to seroconversion was similar regardless of heparin administration.</p> <p>HIT antibodies were <b>no longer detected on day 30 in 60.9%</b> of seroconverted patients.</p> <p>HIT antibody development may be related to trauma severity, with a high disappearance rate on day 30.</p> <p>Heparin → PF4 → HIT Ab</p> |

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### ASSOCIATION OF TRAUMA SEVERITY WITH ANTIBODY SEROCONVERSION IN HEPARIN-INDUCED THROMBOCYTOPENIA: A MULTI-CENTER, PROSPECTIVE OBSERVATIONAL STUDY

[https://journals.lww.com/jtrauma/fulltext/2022/09000/Association\\_of\\_Trauma\\_Severity\\_with\\_Antibody\\_Seroconversion\\_in\\_Heparin-Induced\\_Thrombocytopenia:\\_A\\_Multi-Center,\\_Prospective\\_Observational\\_Study.16.aspx](https://journals.lww.com/jtrauma/fulltext/2022/09000/Association_of_Trauma_Severity_with_Antibody_Seroconversion_in_Heparin-Induced_Thrombocytopenia:_A_Multi-Center,_Prospective_Observational_Study.16.aspx)

**Urine Leaks in Children Sustaining Blunt Renal Trauma**

| Retrospective review of our free-standing Pediatric Level I Trauma Center trauma registry | Univariate and multivariate regression analysis to evaluate predictive factors of urine leaks | Independent predictors:                                                                                                    |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <p>n=347</p> <p>(&lt;18 age, from 2005-2020, presenting with BRT)</p>                     |                                                                                               | <p>Isolated blunt renal trauma OR=2.56</p> <p>High grade injury OR=7.91</p> <p>Upper lateral quadrant injuries OR=2.88</p> |

Ghani et al. *Journal of Trauma and Acute Care Surgery*.  
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### URINE LEAKS IN CHILDREN SUSTAINING BLUNT RENAL TRAUMA

[https://journals.lww.com/jtrauma/abstract/2022/09000/Urine\\_Leaks\\_in\\_Children\\_Sustaining\\_Blunt\\_Renal\\_Trauma.13.aspx](https://journals.lww.com/jtrauma/abstract/2022/09000/Urine_Leaks_in_Children_Sustaining_Blunt_Renal_Trauma.13.aspx)

**The Physiology of Failure: Identifying Risk Factors for Mortality in EGS Patients Using a Regional Health System Integrated EMR**

| Billing data + EMR 2013-2018                                                                                                  | Factors Associated with Higher Mortality                                                                                                 | Conclusion                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>9 hospital health system</p> <p>Patients with AAST EGS diagnoses</p> <p>Administrative &amp; clinical variables merged</p> | <p><b>Inpatient</b></p> <p>Age ↑ WBC ↑ Lactate ↑ Ventilator requirement ↑</p> <p><b>One-year</b></p> <p>Age ↑ Heart rate ↑ Lactate ↑</p> | <p>Clinical datapoints need to be included in EGS mortality assessments which may help with:</p> <ul style="list-style-type: none"> <li>Timely recognition</li> <li>Correcting reducible risk factors</li> <li>Earlier surgical intervention or transfer to higher level of care</li> </ul> |

Baimas-George M, et al. *Journal of Trauma and Acute Care Surgery*. 12.2021  
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### THE PHYSIOLOGY OF FAILURE: IDENTIFYING RISK FACTORS FOR MORTALITY IN EMERGENCY GENERAL SURGERY PATIENTS USING A REGIONAL HEALTH SYSTEM INTEGRATED ELECTRONIC MEDICAL RECORD

[https://journals.lww.com/jtrauma/abstract/2022/09000/The\\_Physiology\\_of\\_Failure:\\_Identifying\\_Risk\\_Factors\\_for\\_Mortality\\_in\\_Emergency\\_General\\_Surgery\\_Patients\\_Using\\_a\\_Regional\\_Health\\_System\\_Integrated\\_Electronic\\_Medical\\_Record.17.aspx](https://journals.lww.com/jtrauma/abstract/2022/09000/The_Physiology_of_Failure:_Identifying_Risk_Factors_for_Mortality_in_Emergency_General_Surgery_Patients_Using_a_Regional_Health_System_Integrated_Electronic_Medical_Record.17.aspx)

BEST OF SURGICAL CRITICAL CARE

BEST OF EMERGENCY GENERAL SURGERY ARTICLE

## Resuscitative endovascular balloon occlusion of the aorta (REBOA) for life-threatening postpartum hemorrhage (PPH)

| Methods                                                                                                                                             | Results                                                                                                         | Conclusion                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nationwide observational study of the Japanese Diagnosis Procedure Combination inpatient database from April 2012 to March 2020                     | <br>Hysterectomy 16.1%         | The results of the present study could be helpful in clinical decision-making and providing patients and families with additional treatment options for PPH |
| <br>Life-threatening PPH patients who have undergone REBOA (n=143) | <br>In-hospital mortality 7.0% |                                                                            |

## RESUSCITATIVE ENDOVASCULAR BALLOON OCCLUSION OF THE AORTA FOR LIFE-THREATENING POSTPARTUM HEMORRHAGE: A NATIONWIDE OBSERVATIONAL STUDY IN JAPAN

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/RESUSCITATIVE\\_ENDOVASCULAR\\_BALLOON\\_OCCLUSION\\_OF.18.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/resuscitative_endovascular_balloon_occlusion_of.18.aspx)

NO VISUAL ABSTRACT PROVIDED

## EAST EVIDENCE-BASED STATEMENT ON “STAND YOUR GROUND” LAWS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/CITATION/2022/09000/EAST\\_EVIDENCE\\_BASED\\_STATEMENT\\_ON\\_STAND\\_YOUR.22.ASPX](https://journals.lww.com/jtrauma/citation/2022/09000/east_evidence_based_statement_on_stand_your.22.aspx)

NO VISUAL ABSTRACT PROVIDED

## LETTER TO THE EDITOR: THE SMALL (14 FR) PERCUTANEOUS CATHETER (P-CAT) VERSUS LARGE (28-32 FR) OPEN CHEST TUBE FOR TRAUMATIC HEMOTHORAX: A MULTICENTER RANDOMIZED CLINICAL TRIAL

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NO VISUAL ABSTRACT PROVIDED

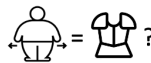
## RESPONSE: LETTER TO THE EDITOR: THE SMALL (14F) PERCUTANEOUS CATHETER (P-CAT) VERSUS LARGE (28-32F) OPEN CHEST TUBE FOR TRAUMATIC HEMOTHORAX: A MULTICENTER RANDOMIZED CLINICAL TRIAL

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## The Armor Phenomenon

A Systematic Review and Meta-Analysis

Does obesity protect those that sustain penetrating thoracoabdominal injuries?



Quantitative analysis incorporated 5,013 patients from nine studies.

Outcomes evaluated:

- injuries sustained
- hospital course
- complications
- mortality

- Obesity protects from visceral injury following stab injuries.
- Obesity increases total and ICU LOS following gunshot injuries.
- Overall, obesity portends an increased risk of pneumonia and death.

The ‘armor phenomenon’ does not protect obese patients from the true sequelae of trauma.

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## ‘THE ARMOR PHENOMENON’ IN OBESE PATIENTS WITH PENETRATING THORACOABDOMINAL INJURIES: A SYSTEMATIC REVIEW AND META-ANALYSIS

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/\\_THE\\_ARMOR\\_PHENOMENON\\_IN\\_OBESE\\_PATIENTS\\_WITH.19.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/the_armor_phenomenon_in_obese_patients_with.19.aspx)

## Management of the Open Abdomen: A Systematic Review with Meta-Analysis and Practice Management Guideline from the Eastern Association for the Surgery of Trauma

| Problem                                                                                                                             | Meta-analyses                                                                                                                                                                                  | Results                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Open Abdomen after Damage Control Laparotomy<br> | PICO 1 (P1): Interventions to reduce visceral edema<br><br>PICO 2 (P2): Use of fascial traction systems<br> | P1: Unable to make recommendation due to very low-quality data<br><br>P2: Improved fascial closure rates<br> |

Mahoney, EJ et al. *Journal of Trauma and Acute Care Surgery*.

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## MANAGEMENT OF THE OPEN ABDOMEN: A SYSTEMATIC REVIEW WITH META-ANALYSIS AND PRACTICE MANAGEMENT GUIDELINE FROM THE EASTERN ASSOCIATION FOR THE SURGERY OF TRAUMA

[HTTPS://JOURNALS.LWW.COM/JTRAUMA/ABSTRACT/2022/09000/MANAGEMENT\\_OF\\_THE\\_OPEN ABDOMEN\\_A\\_SYSTEMATIC.20.ASPX](https://journals.lww.com/jtrauma/abstract/2022/09000/management_of_the_open_abdomen_a_systematic.20.aspx)

## National Blood Shortage: A Call to Action from the Trauma Community

| The Problem                                                                                                                                                              | Recommendations                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| In January of 2022, the American Red Cross declared its first-ever “Blood Crisis”<br> | <br>1. Blood banks should have predefined tiers that define shortages<br>2. Implementation of evidence-based strategies to optimize blood product utilization<br>3. Implementation of strategies to reduce blood wastage<br>4. Increase blood supply |

Stein DM et al. *Journal of Trauma and Acute Care Surgery*. Month Year [doi]

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## NATIONAL BLOOD SHORTAGE: A CALL TO ACTION FROM THE TRAUMA COMMUNITY

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