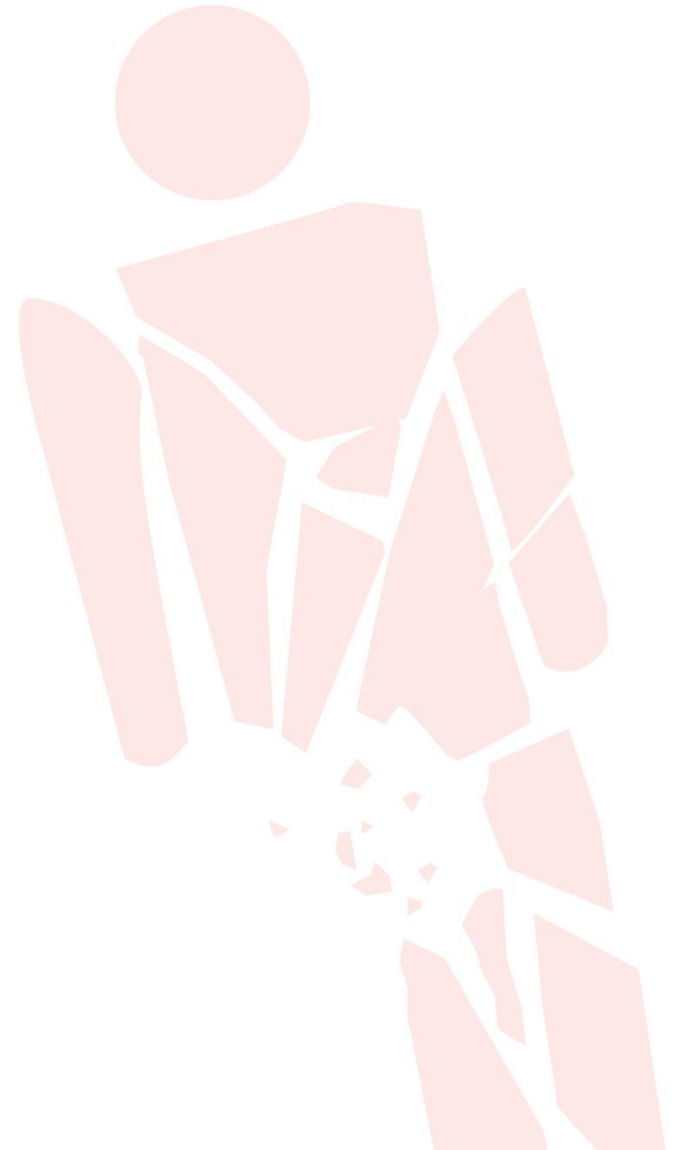


Economics of Blood: ACS COT Position

Jeffrey D. Kerby, MD, PhD, FACS
Chair, Committee on Trauma
American College of Surgeons



No Disclosures



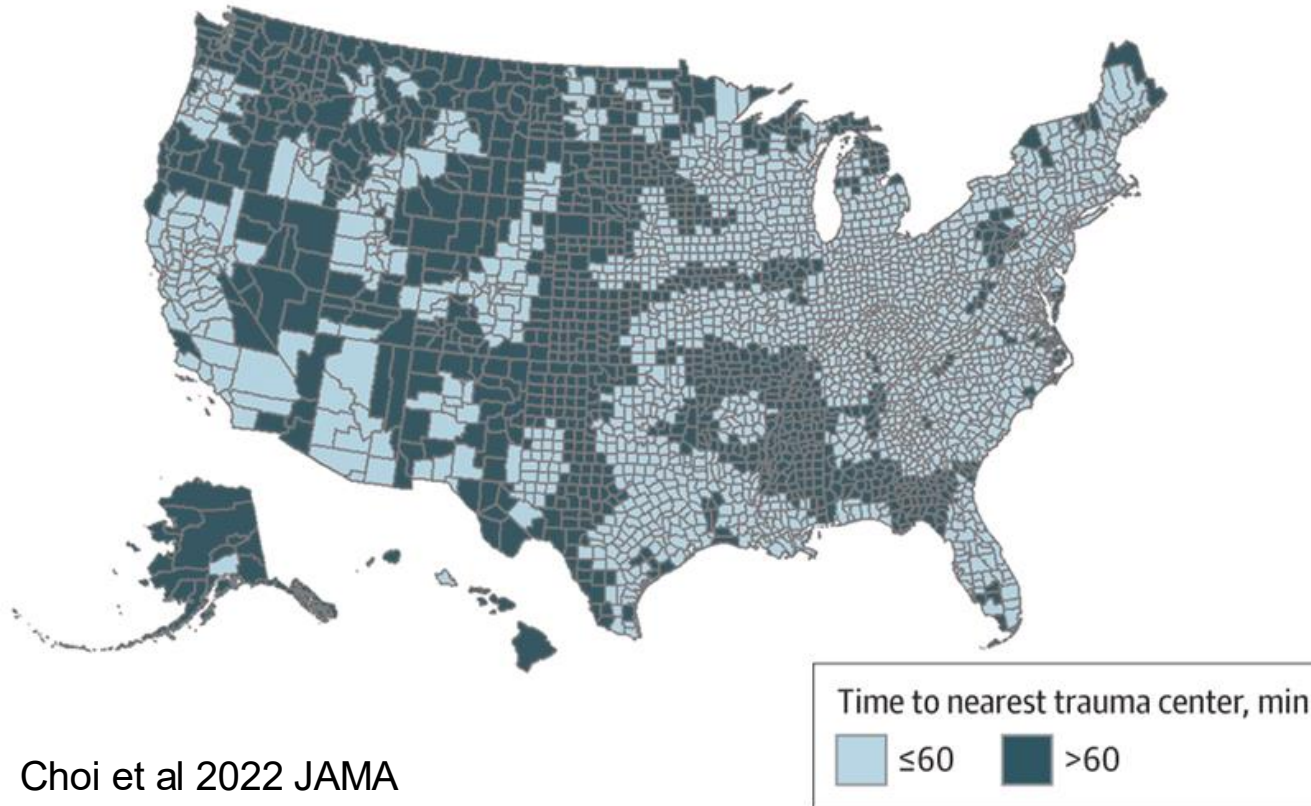
Overview

- Lack of Timely Access to Trauma Care
 - Disparities in Outcomes
- COT Rural Trauma Program
 - Extend the Window of Survivability
- Advocacy
 - Integrated Communications Platform
 - ACS Division of Advocacy and Health Policy
 - Regulatory vs. Legislative Approach
 - SurgeonsVoice
- Regional COT Field Program
 - Prehospital Blood Program Development

Time is Life

47 million Americans live greater than 1 hour from a verified trauma center

A Time to nearest ACS-COT-verified trauma center (level I and II centers)



Choi et al 2022 JAMA

Trauma Outcomes in Rural Environment

Quantifying geographic barriers to trauma care: Urban-rural variation in prehospital mortality

Molly P. Jarman, PhD, Zain Hashmi, MBBS, Yasmin Zerhouni, MD, Rhea Udyavar, MD, Craig Newgard, MD, Ali Salim, MD, and Adil H. Haider, MD, Boston, Massachusetts

J Trauma Acute Care Surg 87(1): 173 – 180, 2019

High prehospital injury mortality in rural versus urban areas

Rural risk: geographic disparities in trauma mortality

Molly P. Jarman, MPH, Renan C. Castillo, PhD, [...], and Adil H. Haider, MD

Surgery 160(6): 1551 – 1559, 2016

Rural residents 14% more likely to die after traumatic injury compared with non-rural residents

**“Where you live should not
determine IF you live”**

An Unfinished Trauma System

Trauma systems have developed at the state/county level

No federal support or standards for trauma systems

Variability in access to care and quality of care

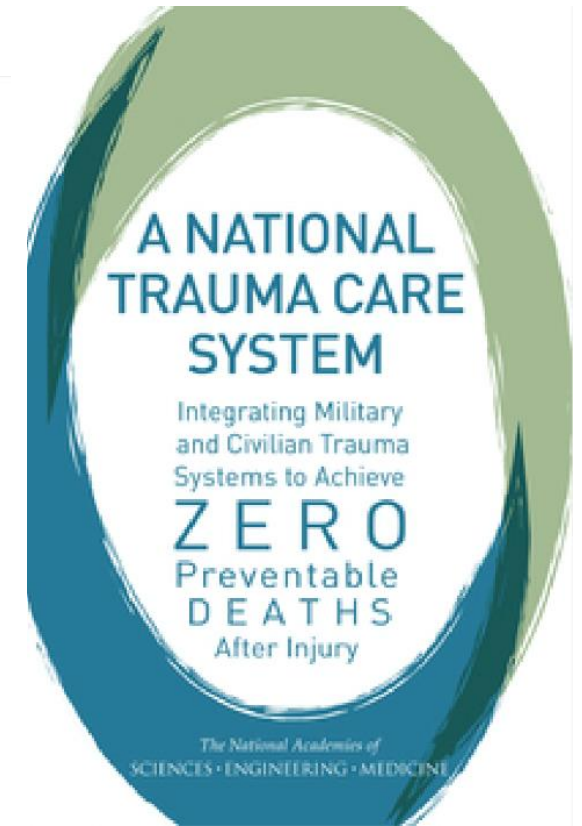
Lack of coordination across state lines

Lack of coordination across the continuum of care

Trauma Center distribution driven by market forces rather than population need

Lack of cooperation between competitive healthcare systems

Disaster preparedness is not a priority



Lack of Trauma Center Access + Unfinished Trauma System

=

High Rates of Preventable Mortality



COT Rural Trauma Program

- Systems
 - RMOCC/NTEPS
 - Teletrauma toolkit
 - Revised interfacility transfer protocols
- Quality
 - Level IV Standards
 - TQIP Participation – limited dataset
 - **Address Prehospital Blood Access/Blood Deserts**
- Education
 - Just in time
 - New education programs tailored to environment
 - RTTDC update - March 2026

The Problem: US Blood Deserts

The Solution: Civilian Walking Blood Banks

Nakul Raykar MD MPH FTL '25



The Solution Framework

A comprehensive research-education-implementation strategy will systematically address blood desert challenges and save lives.

Research - Characterize and Describe Blood Deserts, Solutions:

- **Quantify** preventable deaths in US blood deserts; mixed methods assessments (Kansas/Arkansas model papers) and cross-sectional, analysis (Massachusetts pilot)
- **Qualitative** studies on current mitigation strategies, barriers/facilitators to WBB implementation

Education - Create the Materials to Train Workforce on Emergency Transfusion/WBBs:

- **Multidisciplinary workforce** training modules and seminars-team training on WBB execution
- **Systems preparedness education** - future integration into ATLS/RTTDC courses?

Implementation - Integrate into Policy and Demonstration Projects

- **Institutional:** Backup strategies and local TXA/WBB protocols
- **Regional:** RMOCC integration and coordination
- **National:** Professional society standards and guidelines

Trauma Quality Improvement Program

Improving Care through Data

The ACS TQIP works to elevate the quality of care for trauma patients. In fact, we're already doing that in more than 900 participating trauma centers across the US. TQIP collects data from your trauma center, provides feedback about your center's performance, and identifies institutional characteristics that your trauma center staff can implement to improve patient outcomes. The program uses risk-adjusted benchmarking to provide your hospital with accurate national comparisons.

Prehospital Blood TQIP Study



“We have a
responsibility to
speak for those
who cannot speak
for themselves”

C.T. Thompson, MD, FACS

Improving Access to Prehospital Blood May Save 10,000 Lives a Year

M. Sophia Newman, MPH

March 5, 2025



WHAT SURGEONS CAN DO TO ADVOCATE FOR PREHOSPITAL TRANSFUSION AND WHOLE BLOOD USE



CONNECT with the ACS COT, including its EMS committee and leadership in your region.



ENGAGE with the Prehospital Blood Transfusion Initiative Coalition.



LEARN MORE about the EMS scope of practice in your state, including current and pending blood use protocols.



USE ACS RESOURCES to contact your local policymakers on this issue.

Surgeons Address the Urgent Need to Eliminate ‘Blood Deserts’



Surgeons Voice

Urge Your Representative to Reauthorize
MISSION ZERO

Write

Support ACS Priorities in the Pandemic and
All Hazards Preparedness Act

The Pandemic and All Hazards Preparedness Act (PAHPA) was enacted to improve the nation's response to public health and medical emergencies.

Write

Fully Fund the CDC Injury Center

The CDC Injury Center provides critical injury prevention programming, research, and evaluation and is a key part of our public health infrastructure.

Write

Support ACS Priorities in the Pandemic and All Hazards Preparedness Act

764 actions taken

36 needed to reach next goal

Background:

The Pandemic and All Hazards Preparedness Act (PAHPA) was enacted to improve the nation's response to public health and medical emergencies. The important programs included in PAHPA expired on September 30, 2023. The ACS urges Congress to swiftly reauthorize PAHPA with the following priorities:

Reauthorize the Hospital Preparedness Program and improve medical readiness and response capabilities: Trauma systems are not only responsible for day-to-day emergency and trauma care, but also scale up to respond to public health emergencies that cause regions to experience a surge in capacity, serving as critical infrastructure for disaster and emergency response. Language included in PAHPA would reauthorize the Hospital Preparedness Program and improve coordination and surge capacity of regional medical operations within and among health care coalitions.

Reauthorize the MISSION ZERO Grant Program: The MISSION ZERO grant program supports military-civilian trauma care partnerships allowing military trauma care teams to provide trauma care in civilian trauma centers to gain and maintain experience in treating critically injured patients, increasing readiness for when those units are deployed.

Act Now!

Welcome to *SurgeonsVoice!* To take action now, please log in using your email address and last name.

Fields with an asterisk (*) are required.

First Name *

First Name

Last Name *

Last Name

Address *

Street Address, City, and Sta

Email *

Email

Thank you for joining our campaign. By providing your mobile phone number you consent to receive recurring text messages from our organization. Message & Data Rates May Apply. Text HELP for Info. Text STOP to opt out. No purchase necessary.

Phone Number

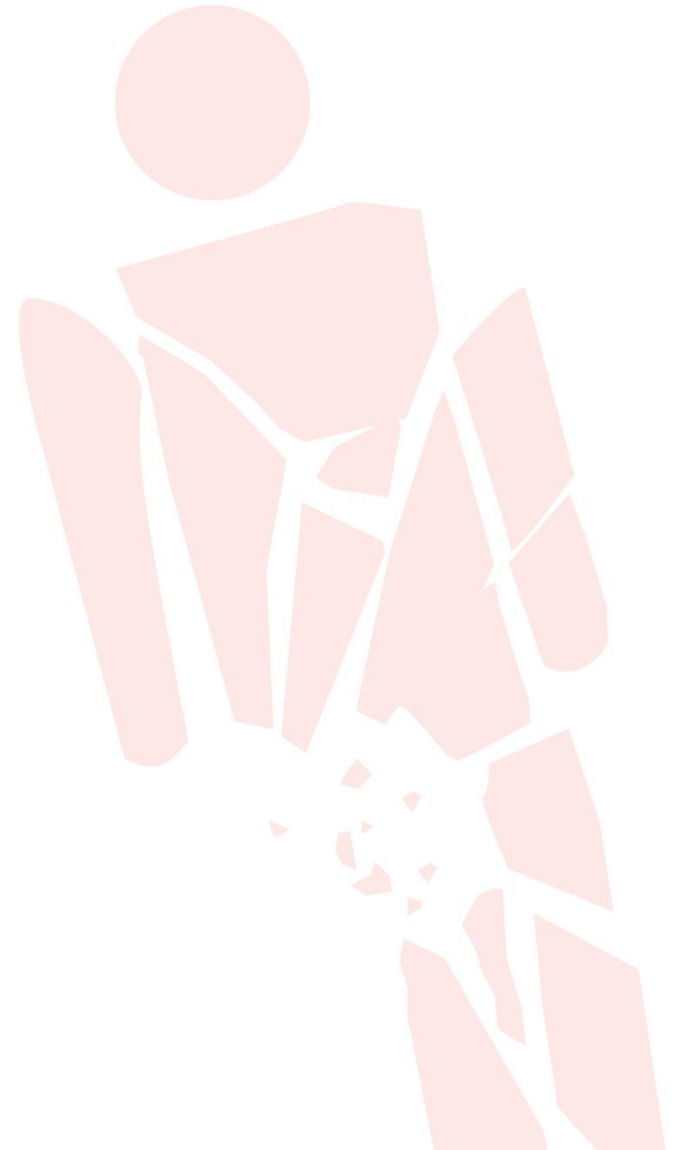
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ACS COT National Trauma and Emergency Preparedness System

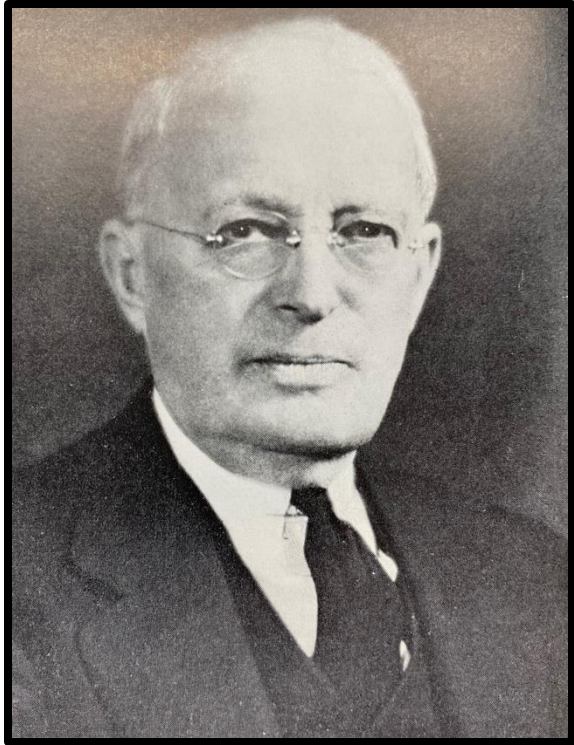
Regional Medical Operations Coordinating Centers (RMOCCs) as "Unit of Action"



COT Regional Committee Field Program



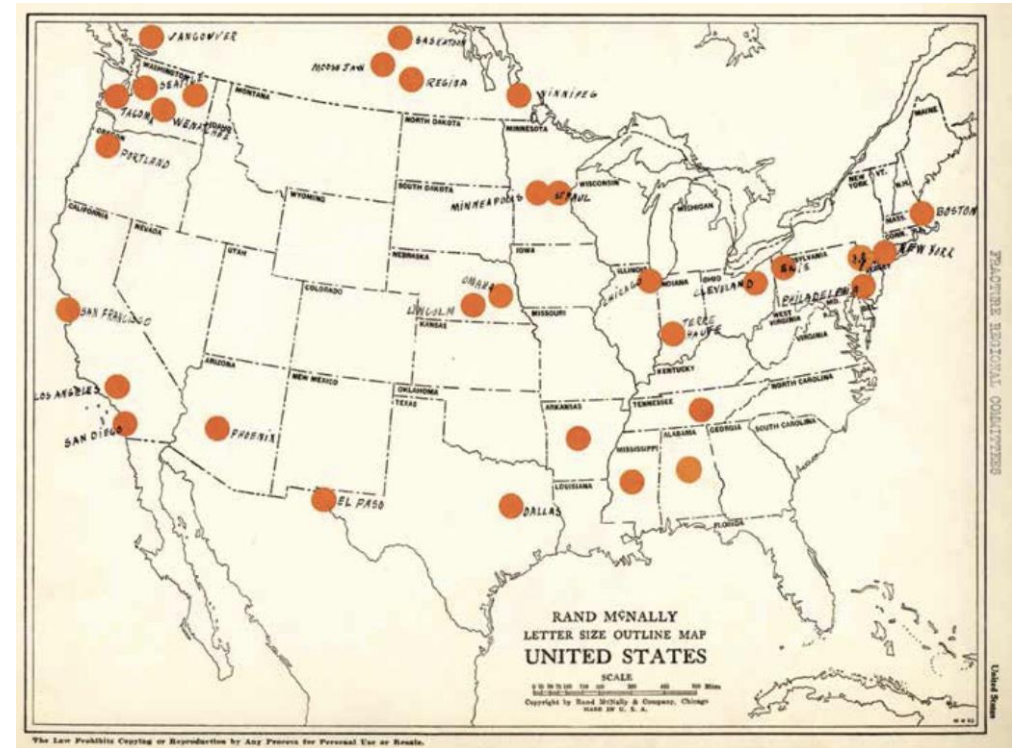
Committee on Fractures - 1922



Charles Locke Scudder, MD, FACS

Original Members of the Committee on the Treatment of Fractures, 1922

- Charles L. Scudder, MD, FACS (Chair)
- John B. Walker, MD, FACS (Secretary)
- Nathaniel Allison, MD, FACS
- A.P.C. Ashurst, MD, FACS
- Joseph A. Blake, MD, FACS
- Frederick J. Cotton, MD, FACS
- William Darrach, MD, ScD, LLD, FACS
- William L. Estes, Sr., MD, FACS
- W. Edward Gallie, MD, FACS
- Fraser N. Gurd, MD, FACS
- George W. Hawley, MD, FACS
- A.J. Jones, MD, FACS
- Paul B. Magnuson, MD, FACS
- Lloyd Noland, MD, FACS
- Robert D. Osgood, MD, FACS
- William O'Neill Sherman, MD, FACS
- Ernst A. Sommer, MD, FACS
- Kellogg Speed, MD, FACS



1939 – Committee on Fractures and Other Trauma
1949 – Committee on Trauma

COT Regional Committee Field Program

Initiatives – Monthly Calls/Accountability

- Current
 - RMOCC Development
 - Pediatric Readiness
 - STB Training Promulgation/Advocacy
- In Development
 - **Prehospital Blood Program Development**
 - Teletrauma
 - RTTDC Promulgation

Thank You

