

Survey of Prehospital Blood Use in the US

Presented by:

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Can we do this?

Extension of hospital Emergency Release Blood Products (ERBP) Programs

- Uncrossmatched blood; Implied Consent

AABB permits Emergency Release Low Titer O Whole Blood

- Standard 5.15.1

Military has been doing it for over 20 years with success

Civilian implementation

- HEMS in all 50 states
- Ground since 2016

Who Is Doing Prehospital Blood?



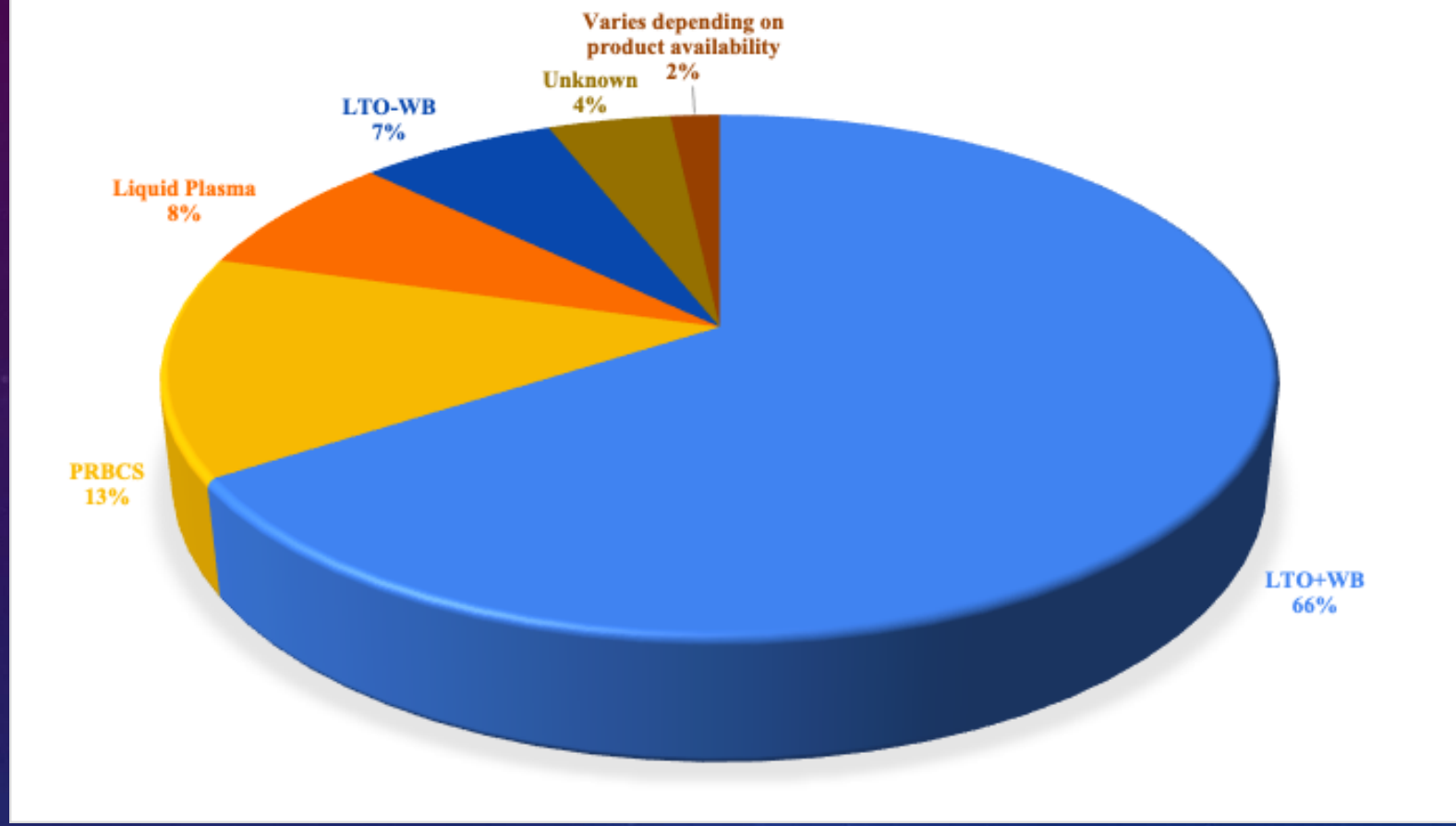
9-1-1 Ground EMS Blood Carrying Agencies as of October 2023

Source: Schaefer, R., Bank, E., Krohmer, J., Haskell, A., Taylor, A. Jenkins, D., Holcomb, J. (2024). Removing the Barriers to Prehospital Blood Transfusion: A Roadmap to Success.



Ground EMS Prehospital Blood Transfusion Programs as of July 2024

TYPE OF PREHOSPITAL BLOOD PRODUCTS AVAILABLE BY PERCENT



Source: Schaefer, R., Bank, E., Krohmer, J., Haskell, A., Taylor, A. Jenkins, D., Holcomb, J. (2024). Removing the Barriers to Prehospital Blood Transfusion: A Roadmap to Success.

Not Just For Trauma Patients

MILITARY MEDICINE, 00, 0/0:1, 2021

The Use of Whole Blood Transfusion During Non-Traumatic Resuscitation

Craig D. Nowadly, MD¹; Andrew D. Fisher, MD, LP^{2,3,4}; Matthew A. Borgman, MD^{5,6};
Kennedy S. Mdaki, PhD⁷; Ronnie L. Hill, MS⁸; Susannah E. Nicholson, MD⁹;
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Efficacy and Safety of Whole Blood Transfusion in Non-Trauma Patients

Alison A. Smith, MD, PhD, Rahaf Alkhateb, MD, MSc, Maxwell Braverman, DO, Charles P. Shahan, MD, Benjamin Axtman, MD, Susannah Nicholson, MD, Leslie Greebon, MD, Brian Eastridge, MD, Rachelle B. Jonas, RN, BSN, Ronald Stewart, MD, Randi Schaefer, MSN, RN, CEN, Mark Foster, MD, Donald Jenkins, MD

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<https://doi.org/10.1177/00031348211048831>

Resident Eagle: Whole Blood in the Rural EMS Environment

Casey Ebrom, EMT-P, FP-C; Craig Manifold, DO, FACEP, FAAEM, FAEMS; and Randi Schaefer, MSN, RN, ACNS-BC, CEN

July 2020

Prehospital Transfusion of Low-Titer O + Whole Blood for Severe Maternal Hemorrhage: A Case Report


Ryan Newberry , DO MPH¹, C.J. Winckler, MD LP, Ryan Luellwitz, DO, Leslie Greebon, MD, Elly Xenakis, MD, William Bullock, EMT-P, ...show all

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SESC Podium Paper

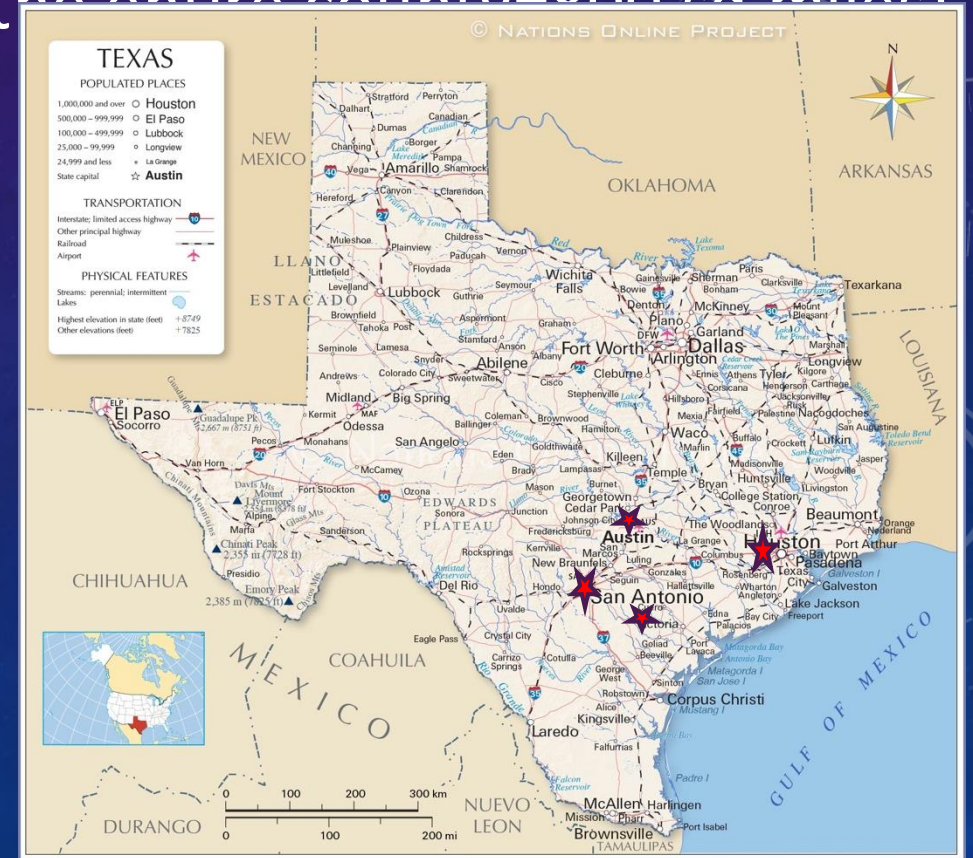
Changing the Playing Field: A Prehospital Blood Product Pilot Project in Rural North Georgia

Nathan Creel, MD¹, Jesse Gibson, MBA, BSN, RN², Kyle Gibson, MSN, APRN, AGACNP-BC¹, Lissa Shirley, MSA, MT(ASCP)SBB³, and Charles Richart, MD⁴

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Snapshot Of Medical/Non-Trauma Use

- Karnes County EMS, Texas (15,000 people in the entire county—800 sq miles)
 - 50%
- Greater Houston metro area, Texas
 - 60%
- Austin
 - 40%
- San Antonio Fire Department
 - 40%



Blood Sourcing Models



Blood Supplier to EMS agency



Hospital Blood Bank directly to
EMS agency



Blood Supplier ships to a hospital (or
other location) to hold to give to EMS
agency

LTOWB Is not limited to Level I & II Hospitals

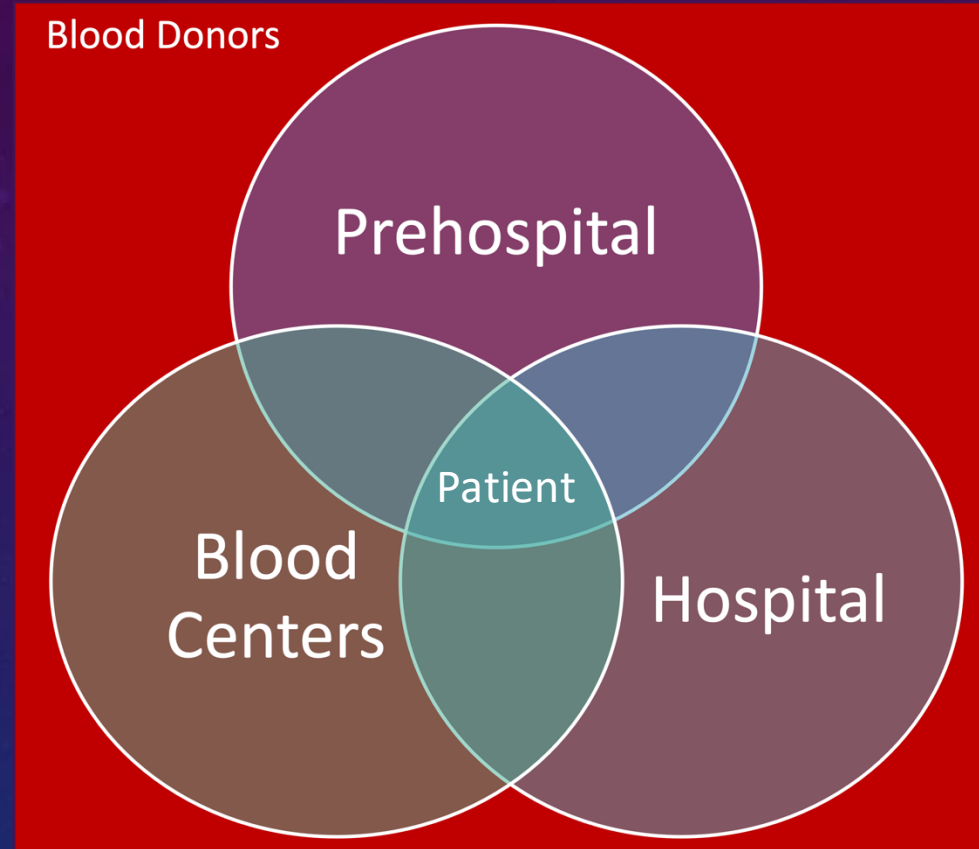
Military Nursing

Low-Titer O-Positive Whole Blood: Lessons From the Battlefield for Civilian Rural Hospitals

Sean O'Hollearn, MSN, CCRN
Randall Schaefer, DNP, RN, ACNS-BC, CEN
Cassandra DuBose, MSN, RN
Darin Smith, BSN, RN, CEN, TCRN
Carl Goforth, PhD, RN, CCRN

- Rural hospitals gained platelets and defrosted plasma
- Level III, Level IV, and Undesignated Trauma Center use can support EMS program growth

Team Effort



No other prehospital lifesaving intervention requires this level of multi-disciplinary, multi-institutional support.

Is The Work Worth the Effort?





A Lifesaving Intervention Given Too Late Is Not A Lifesaving Intervention.

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Caption Eric Bank Assistant Chief of EMS Harris County ESD 48 Fire Department
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