

# Prehospital Portfolio

## PRODUCT SPECIFICATIONS

Vitalant's portfolio is designed to meet the urgent and complex needs of emergency medical services (EMS), especially in prehospital environments where rapid access, simplicity, and clinical effectiveness are critical. While no single blood product has been definitively proven to yield superior outcomes over others in prehospital care, blood products consistently demonstrate clinical advantages over crystalloids, the current standard of care.

### Low Titer O Positive Whole Blood (LTO+WB)

LTO+WB delivers red cells, plasma, and platelets in a single product, simplifying logistics. Its use in military and civilian trauma care has demonstrated the potential to improve survival in patients requiring massive transfusion.

### Liquid Plasma (LP)

Liquid Plasma (LP) is immediately available with no thawing required, making it ideal for remote and austere environments. LP offers a reliable source of coagulation factors for hemorrhage control.

### Red Blood Cells (RBC)

Red blood cells support oxygen delivery in hemorrhagic shock and trauma and offer a practical and scalable option for EMS systems. This is a stocked product that can be ordered on demand and offers the longest viable shelf life among available options.

Product Specifications	Low titer O+ whole blood (LTO+WB)	Liquid plasma (LP)	Red blood cells (RBC)
Reason for transfusion*	Contains all constituents of blood	Correct coagulopathy, restore endothelial integrity	Increase oxygen carrying capacity
Storage conditions	1–6°C	1–6°C	1–6°C
Transport conditions	1-10 °C	1-10 °C	1-10 °C
Shelf life	21 days	26 days	42 days
ABO type	O+ only	Group A	Group O

*\*THOR-AABB Working Party Recommendations for a Prehospital Blood Product Transfusion Program*

## Future Facing Innovation: Expanding Access to Emergent Care

Looking forward, Vitalant is investing in product innovation that will expand the boundaries of where and how blood can be used – ultimately supporting broader access to blood products and emergent care across a range of environment and populations:

**Spray-Dried Plasma:** shelf stable and easily reconstituted, making it well suited for austere settings. Represents a major advancement in portable transfusion capabilities.

**Next Generation Lyophilized Platelets:** Under development, this second-generation product could represent a viable option in specialized or future-forward prehospital environments.