Receiving Hospital Resource Document

What can you expect when EMS transports a pilot patient to your facility?
Patients who meet criteria for transfusion will have had low-titer Group O+ whole blood (LTO+WB) rapidly warmed and transfused via large bore IV or IO.

Patients will arrive with a neon green wristband labeled "EMS Blood Tx", which will have a scannable QR code that links to more program specific information. All used blood bags (including segments) and tubing will be left with the accepting nurse for further blood bank testing as needed.

EMS will report transfusion related information during verbal patient handover including:

- Indication for transfusion
- Type of blood product administered
- Total volume of blood product administered
- If transfusion was stopped prior to completion and, if so, why
- Any adverse reactions including suspected transfusion reactions
- Any additional medications given (e.g., TXA)

Further patient care details can be found in the prehospital electronic patient care record.

Alloimmunization Guidance
Patients are transfused with low-titer Group O+ whole blood (LTO+WB) as part of the LA-DROP prehospital blood transfusion program to save their life. This LTO+WB is Rh-positive, meaning it has the potential to alloimmunize an Rh-negative patient by triggering the development of anti-D antibodies. Anti-D antibodies will not harm the patient but could possibly impact future pregnancies.

If the patient is Rh-negative and potentially desires pregnancy in the future:
Consult your hospital's transfusion medicine service and pharmacist about recommended management strategies and treatment plans including **administration of Rh immunoglobulin (RhIg) within 72 hours**. If needed, you may contact the Director of the Harbor-UCLA Transfusion Medicine Service at 424-306-6227 for technical program questions. Additional resources are available at www.allohopefoundation.org.

Recommendations for management of potential Rh-alloimmunization:

- Discuss the potential for Rh antibody (anti-D) formation. If there is no possibility that the patient will be pregnant in the future, RhIg carries little benefit. If future pregnancies are possible, consider whether to administer RhIg to prevent anti-D development.
- Standard Dose: A **300 microgram** dose of RhIg can suppress the immune response to up to **30 mL** LTO+WB. Each unit of LTO+WB is approximately 500 mL.
- RhIg administration is contraindicated if the Rh-positive RBC volume transfused is >20% of the patient's total blood volume due to the potential for marked red cell splenic sequestration and hemolysis.

For Rh-negative patients, we recommend repeating Type and Screen testing **6-12 weeks** following the exposure to the LTO+WB to determine the development of anti-D antibodies. If antibody testing remains negative, then it is unlikely that patients will develop anti-D later. If the patient may become pregnant and has developed anti-D, the patient should be informed of the potential impact on future pregnancies and understand the importance of sharing this information with their healthcare providers. If they become pregnant, the patient should be referred to an obstetrician who specializes in maternal-fetal medicine.

Patient outcomes and adverse event reporting
The participating EMS Provider Agency Medical Directors will reach out to the Trauma Program Managers or other established hospital points of contact for limited critical outcome data, including transfusion reactions. Data will be obtained via a secure HIPAA-compliant form. Timely and complete outcome data will ensure patient safety and is required by the California EMS Authority. The receiving hospital blood bank will be contacted by the Director of Transfusion Medicine at Harbor-UCLA should any look backs or other notifications be required.