



TRALI Risk Reduction Policy

Overview **Transfusion-related acute lung injury (TRALI)** is a rare but potentially fatal complication of blood product transfusion. One of the risk factors is antibodies to the human leukocyte antigen (HLA).

Although uncommon, HLA antibodies can be formed when a woman is pregnant. When a woman is pregnant she will be exposed to her fetus' cells which may have a different HLA type than her own. Her immune system will see the fetus' HLA as "foreign" and could make antibodies against them.

Because of the preceding, AABB has developed strategies to reduce the risk of TRALI:

- The original standard was 5.4.1.2, published in the 29th edition of *Standards for Blood Banks and Transfusion Services*
 - Effective April 1st, 2014
 - Applied to plasma and whole blood
- The most recent standard is 5.4.1.3, published in the 30th edition of *Standards for Blood Banks and Transfusion Services*
 - Effective October 1st, 2016
 - Now includes apheresis platelets, in addition to plasma and whole blood
- For rationale, see AABB Bulletin #14-02

Standard 5.4.1.3, AABB Standards for Blood Banks and Transfusion Services, 30th Ed

"Plasma, Apheresis Platelets, and Whole Blood for allogeneic transfusion shall be from males, females who have not been pregnant, or females who have been tested since their most recent pregnancy and results interpreted as negative for HLA antibodies."

AABB Bulletin #14-02

"The AABB Board of Directors has approved recommendations to meet [previously] AABB Standard 5.4.1.2, published in the 29th edition of *Standards for Blood Banks and Transfusion Services (BBTS Standards)*. These recommendations were prepared by members of the Blood Bank/Transfusion Service Standards Program Unit, the AABB Transfusion-Related Acute Lung Injury (TRALI) Task Force, and the work group responsible for AABB's July 2013 conference on TRALI risk reduction. The recommendations have also been reviewed and approved by the Blood Bank/Transfusion Service Standards Program Unit for consistency with the *BBTS Standards*."

"This bulletin is intended to:

- Outline current scientific knowledge about the risk of TRALI from plasma transfusion and about interventions to reduce this risk.
- Provide recommendations on methods to meet [previously] AABB



Standard 5.4.1.2 in the 29th edition of *BBTS Standards*.

- Describe operational and other logistical considerations in the implementation of [previously] Standard 5.4.1.2”

“The products to which this standard applies include the following:

- Fresh Frozen Plasma (FFP) obtained from whole blood.
- FFP obtained from apheresis [plasmapheresis, or collected concurrently with a cellular component (red cells or platelets)] (combined) red cell plasmapheresis, concurrent (combined) platelet-plasmapheresis].
- Plasma, Cryoprecipitate Reduced (ie, cryo-poor plasma) obtained from whole blood.
- Plasma Frozen Within 24 Hours After Phlebotomy (PF24) obtained from whole blood or apheresis.
- Plasma Frozen Within 24 Hours After Phlebotomy Held At Room Temperature Up To 24 Hours After Phlebotomy (PF24RT24) obtained from apheresis.
- Thawed Plasma from any of the above products.
- Liquid Plasma.
- Whole Blood (if designated for transfusion as whole blood rather than for component preparation).”

Actions

As of October 1st, 2016, plasma, apheresis platelets, and whole blood for allogeneic transfusion will be from males, females who have never been pregnant, or females who have tested negative for HLA antibodies since their most recent pregnancy.

Continual Action

LifeServe will monitor blood industry communications and update this policy as necessary.