LIPEMIA IN BLOOD PRODUCTS

What you should know
Lipemia is a naturally occurring phenomenon that may cause the appearance of blood products to be “milky” but does not affect their safety or effectiveness in treating patients. MVRBC hospital customers are not always aware of this and become concerned about the appearance of these products. As a result, MVRBC is asked to waste many units of blood needlessly. In an effort to reduce the waste of potentially lifesaving products, we would like to provide information to concerned hospitals about the safety and effectiveness of lipemic blood products so that they can make better informed decisions regarding their use at their facilities.

What causes lipemia in blood products?
Lipemia is presence of a high concentration of lipids (or fats) in the blood. When donated blood is lipemic it causes the plasma-containing products to have a milky appearance.

Are lipemic products safe for transfusion?
Lipemia itself does not affect the safety of a blood product. Lipemia, if excessive, might interfere with our ability to perform infectious disease testing. When excessive lipemia interferes with testing, all components are discarded at MVRBC.

Do lipemic blood products work as well for patients receiving a transfusion?
Lipemia does not affect the therapeutic value of a blood product.

What causes lipemia?
Lipemia is a condition in which increased amounts of lipids are present in the blood, and occurs frequently after eating, which blood donors are, of course, encouraged to do before donating.

Why are some blood products lipemic?
The most common cause for a lipemic blood product is a donor who ate a high fat meal just before donating blood.

What does a lipemic blood product look like?

<table>
<thead>
<tr>
<th>Component</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Blood/RBC</td>
<td>A grossly lipemic Whole Blood/RBC will appear similar to a strawberry milkshake</td>
</tr>
<tr>
<td>Plasma</td>
<td>Opaque (milky) appearance</td>
</tr>
<tr>
<td>Platelets</td>
<td>Opaque (milky) appearance</td>
</tr>
</tbody>
</table>

What if there is still concern about a lipemic appearing product by a customer?
1. Non-lipemic products will be re-issued as requested.
2. Question/concerns to be documented on a Customer Connection & shared with the appropriate CSC or Mike Rasso (for Resource Sharing hospitals).