TRANSFUSION ASSOCIATED DISEASE, RECALL, OR COMPLICATION INVESTIGATION POLICY

I. FATALITIES AND COMPLICATIONS ASSOCIATED WITH TRANSFUSION:

A. TRANSFUSION RELATED FATALITY:

FDA and MEDIC must be notified immediately, and subsequently in writing, when a possible transfusion related fatality occurs and is suspected to be due to an attribute of the donor or a problem with the collection, processing, storage or shipment of the blood component.

B. TRANSFUSION RELATED SERIOUS COMPLICATION INCLUDING TRALI:

MEDIC must be notified immediately, and subsequently in writing, when a possible transfusion related serious complication occurs, and is suspected to be due to an attribute of the donor or a problem with the collection, processing, storage or shipment of the blood component.

TRALI:

Transfusion-related acute lung injury (TRALI) also must be reported. It is a clinical syndrome associated with transfusion that typically includes dyspnea, hypoxemia, hypotension, bilateral non-cardiac pulmonary edema, and fever. Symptoms may occur during the period between the beginning of transfusion and 6 hours afterward. The severity of symptoms can range from mild to severe. However, in a large series of TRALI cases, 100% required oxygen support, and 72% also required mechanical ventilation. In this same series, symptoms resolved within 96 hours in 80% of patients. The other 20% of patients required longer support, which was associated with persistence of pulmonary infiltrates on chest radiograph. TRALI has been associated with the presence of granulocyte antibodies, HLA class 1 antibodies, HLA class II antibodies, and biologically active lipids in donor plasma. All plasma-containing blood components, including red blood cells, platelets, frozen plasma (FFP/FP-24), and cryoprecipitate have been implicated in TRALI.

MEDIC has limited the collection of frozen plasma and most platelet pheresis products to male donors or female donors who have never been pregnant or have been tested to be HLA antibody negative since their last pregnancy.

C. SUSPECTED BACTERIAL CONTAMINATION:

1. Transfusion Service should notify MEDIC of any product found to be contaminated with bacteria by Gram's stain or culture in the investigation of a suspected patient reaction or unit with questionable appearance.

2. PLATELET PHERESIS:

   a. MEDIC will monitor each platelet pheresis for bacterial contamination until the outdate of the product by use of the BacT/ALERT 3D System.

   b. MEDIC will notify the transfusion service if a positive culture is detected on a platelet pheresis that has been shipped, with a request for return of the product if transfusion has not taken place.

   c. MEDIC will have the positive culture bottle sent for a STAT Gram's stain and subsequent sub-culture.

   d. Results of the Gram's stain will be phoned to the transfusion service if transfusion has occurred.

   e. The transfusion service will be responsible for notification of the attending physician.

   f. Culture reports will be called or faxed to the transfusion service as they become available.

3. FOLLOWUP IF A CLINICALLY SIGNIFICANT ORGANISM IS PRESENT IN A BLOOD PRODUCT:

   a. If culturing of a blood product reveals the presence of a clinically significant organism that may have come from a bacteremic donor and the product has already been transfused, a donor investigation shall be initiated at the direction of the Chief Medical Officer of MEDIC. The investigation should determine if a condition causing a bacteremia exists in the donor that may require treatment and may present reason for deferring the donor until the condition is eliminated. Such a donor investigation shall occur whether or not the recipient develops a bacteremia or sepsis following the transfusion of the contaminated product.

   b. When a contaminated product containing a potentially clinically significant organism has been transfused, a report form for information regarding the recipient outcome and blood culture results will be sent to the Medical Director of the transfusion service where the event has occurred. This form should be completed and returned to the Chief Medical Officer of MEDIC for use in investigation of the case.

D. POST TRANSFUSION DEVELOPMENT OF INFECTIOUS DISEASE:

MEDIC is to be notified in a suspected case of transfusion transmitted infectious disease that is confirmed or **not** ruled out. For Hepatitis cases, only report cases that developed 15 to 182 days post-transfusion.

1. INITIATION OF INVESTIGATION:

The transfusion service is to complete the Transfusion Associated Disease Investigation form with the following information:

a. Indicate the disease being reported
b. Patient case number
c. Reporting hospital name and address
d. Transfusing hospital name and address (if different)
e. Diagnosis at time of transfusion
f. Date symptoms first appeared
g. Date reported
h. Possible exposure to hepatitis or any other risk factors
i. Other products administered
j. Test results for HBsAg, Anti-HBc, Anti-HCV, HIV, Western Blot, HTLV-I/II – **NOTE:** *It is up to the Transfusion Service to obtain these test results even if they were not performed in your facility.*
k. Component information:
    1) component unit number
    2) product transfused
    3) date transfused
l. MEDIC notified date and by.

Forward the form to MEDIC. The investigation will not be initiated at MEDIC until all of the information requested above is received.

2. INVESTIGATION:

MEDIC will:

a. Review medical histories and testing records

b. Request donors to give samples for testing (if necessary). MEDIC will notify original source to request follow-up, if the unit was from another source. The investigation is active until all involved donors have given subsequent samples **or** up to one year.

3. COMPLETION OF INVESTIGATION:

The Transfusion Associated Disease Investigation Report along with a letter acknowledging the hospital's report and investigation results will be sent to the transfusion service. Investigation results are kept on file indefinitely at MEDIC.

II. MARKET WITHDRAWAL AND LOOK-BACK POLICY:

MEDIC will identify and quarantine in-date units from prior collections whenever a donor has a repeatedly reactive screening test for HBsAg, Anti-HCV, Anti-HIV-1/2, Anti-HTLV-I/II, Anti HBc, ANTI-T. cruzi, and/or a NAT reactive (HBV, HIV, HCV and/or WNV). MEDIC will notify transfusion services of units from prior collections for certain reactive results to facilitate recipient notification.

A. FOR REPEATEDLY REACTIVE TESTS FOR HBsAg, ANTI-HCV, ANTI-HIV-1/2, ANTI-HTLV-I/II, ANTI-HBc, Anti-T. cruzi (Chagas), or NAT REACTIVES (HBV, HCV, HIV OR WNV), MEDIC WILL:

1. Identify promptly (within 3 days) in-date units from prior collections, as shown below whenever a donor has a repeatedly reactive screening test.

a. HBsAg, Anti-HBc, HBV-NAT, Anti-HTLV I/II:

Withdraw in-date products collected within the 12 months prior to the last negative test and no more than 5 years from current donation whenever a donor has a repeatedly reactive screening test for HBsAg, Anti-HBc, HBV-NAT or Anti-HTLV I/II.

b. HCV:

1) Withdraw products within 12 months from last negative test, or 10 years from current donation, whichever is less, whenever a donor has a repeatedly reactive screening test for Anti-HCV.

2) Withdraw products within 12 months prior to donors positive HCV-NAT.

c. HIV:

Withdraw products drawn within 5 years from repeatedly reaction donation, whenever donor has a repeatedly reactive screening test for Anti-HIV-1/2, or a positive test for HIV by NAT.

d. WNV-NAT:

Withdraw in-date products collected within 120 days prior to the current donation.

e. T. cruzi (Chagas):

Withdraw all in-date products.

2. Quarantine or recall (within 72 hours) from transfusion service any in-date components from prior collections not transfused that fall within the time periods listed above.

NOTE: *Previously collected components may be released for transfusion if a FDA licensed supplemental test on the current sample is negative.*

B. NOTIFICATION BY MEDIC:

1. MEDIC Quality staff will file a Biological Product Deviation Report with the FDA for any case in which a donor is confirmed to be reactive for a test and there were in-date products retrieved or recovered plasma products shipped within the time frames specified above.

2. Confirmed reactive HIV or HCV cases may also involve Lookback Notification. Refer to Section II. C.

3. Any required hospital notifications for lookback must be completed within 45 days of completing supplemental testing, as required by FDA.

C. LOOKBACK POLICY:

1. FOR CONFIRMED REACTIVE TEST FOR ANTI-HIV-1/2 (WESTERN BLOT REACTIVE OR INDETERMINATE) or HIV-NAT REACTIVE, MEDIC WILL:

   a. Notify by letter the Administrator of the hospital and the Medical Director of the transfusion service receiving each component from previous donations.

   b. Request the hospital transfusion service to:

      1) Contact the recipient's physician and request the physician to inform recipient(s) that:

         a) there is a possibility they may have been infected with HIV.

         b) this question may be resolved by testing a sample of the recipient's blood

         c) MEDIC will order recipient testing upon request.

      2) Complete the Lookback Testing Request and return it to MEDIC if samples are sent to test.

2. FOR REACTIVE ANTI-HCV or POSITIVE HCV-NAT MEDIC WILL:

   a. Notify by letter the Medical Director of the transfusion service receiving each component from previous donations.

   b. Request the hospital transfusion service to:

      1) If HCV NAT reactive or second HCV screen is positive, contact the recipient's physician and request the physician to inform recipient(s) that:

         a) there is a possibility they may have been infected with HCV.

         b) this question may be resolved by testing a sample of the recipient's blood

c) MEDIC will order recipient testing upon request.

2) Complete the Lookback Testing Request and return it to MEDIC if samples are sent to test.

3. T. CRUZI (CHAGAS) WITH POSITIVE SUPPLEMENTAL TEST RESULT OR GEOGRAPHIC RISK FACTOR PRESENT FOR THE DONOR:

a. Notify by letter the Medical Director of the Transfusion Service receiving each component from previous donations listed in our computer system.

b. Encourage the hospital to notify the recipient's physician of record of a possible increased risk of T. cruzi infection from these blood products.

III. PRODUCT RECALL:

MEDIC will institute a product recall for issued components when errors or additional information are discovered that could have an adverse effect on the safety, purity or potency of the product.

A. MEDIC STAFF RESPONSIBILITY:

Staff discovering issued component with labeling or processing errors, or staff answering calls from donors that require product recalls will:

1. Determine the location of each component involved.

2. Institute a product recall immediately for in-date products by contacting the hospital transfusion service to determine the status of blood components and/or arrange for their return.

3. Document the date hospital transfusion service was notified by phone, including name of person notified and your initials.

4. Photocopy the label of a product that was incorrectly labeled (blood group, Rh, expiration date, unit number, etc.) upon its return to MEDIC.

NOTE: *If a consignee is instructed to change the label, ask them to photocopy the label before and after changes and forward copies to MEDIC.*

5. Photocopy the involved records for each product distributed.

6. Complete retesting if required.

7. Chief Medical Officer and/or Quality will assess corrective action and determine:

    a. Product to be released:

    b. Product will not be released:

        1) Quarantine product(s)

        2) Document quarantine and destruction.

B. MEDIC QUALITY DEPARTMENT WILL:

1. Assess corrective action and determine if appropriate.

2. Notify each consignee of recall of products with a Blood Product Notification letter.

3. Notify the Director, Office of Compliance Center for Biologics Evaluation and Research of the Food and Drug Administration of any deviations affecting the safety, purity or potency of any distributed product.