Name of Policy:	**Administration of Blood and Blood Components**
Policy Number:	3364-108-402
Department:	Pathology/Laboratory – Blood Bank
Approving Officer:	Vice President & Executive Director Associate Professor Director, Clinical Pathology/Hematopathology
Responsible Agent:	Core Lab Coordinator (Michelle Bartkowiak, MT(ASCP)SBB) Manager, Lab (Cynthia O'Connell)
Scope:	Pathology/Laboratory – Blood Bank

THE UNIVERSITY OF TOLEDO 1872

Effective Date: **2/27/2009**
Initial Effective Date: 6/1996

_____ New policy proposal
_____ Major revision of existing policy
__X__ Minor/technical revision of existing policy
_____ Reaffirmation of existing policy

(A) Policy Statement

The Blood Transfusion Service provides guidelines for the proper administration of blood and blood components though the appropriate use of filters, needles, pumps, and blood warmers.

(B) Purpose of Policy

To insure the safe and appropriate administration of blood and blood components by nursing and medical staff.

(C) Procedure

1. Follow the blood administration procedure outlined in the UTMC Nursing Guidelines: Blood and Blood Products. The transfusionist and another individual, both qualified for their role by credential, licensure, or academic/clinical training, must verify physician orders for transfusion, confirm the identity of the intended recipient and verify the donor unit identification, expiration and compatibility in the presence of the recipient. The transfusionist must sign the Transfusion form in space (1) and the verifier must sign in space (2), indicating they have checked the identification information immediately prior to initiating the transfusion.
2. Take patient's temperature, pulse, respiration rate and blood pressure prior to initiating transfusion. Record on the Blood Flow sheet and/or Transfusion Record form. Remain with the patient for the first 15 minutes. Monitor and record vital signs 15 minutes into transfusion and at designated intervals throughout transfusion.
3. Blood must be administered as soon as possible after issue. Storage of blood in unmonitored refrigerators is prohibited. If it is not possible to begin transfusion within 30 minutes, return the donor unit to the Blood Transfusion Service for storage. The blood is unacceptable for reissue if the temperature of the unit exceeds 10°C.
4. Blood and blood components must be administered through filters. Standard blood administration sets have an in-line 170-260μ filter.
5. 18- or 19-gauge needles are recommended for good flow rates and to minimize red cell damage. Infusion pumps (Alaris 8150 Intravenous pump) may be used for transfusion.
6. Only normal saline (0.9 %) may be added to blood or blood components prior to or during transfusion. Lactated Ringer's and 5% dextrose in water are NOT to be used with blood and blood transfusion because of interference with the anti-coagulant in the blood that may result in clot formation and hemolysis.
7. Infuse Red Cell Products within four hours or as fast as patient can tolerate for massive blood loss. Fresh frozen plasma, platelets and cryoprecipitate should be infused at a rate of approximately 10-ml per minute.

8. Warming of blood must be accomplished only by transfusion through a properly maintained blood warmer and transfusion set. Blood warmers are equipped with alarms that activate if temperatures greater than 38°C are detected. Breaker and temperature alarms should be tested prior to use by pressing the "Breaker" and "Alarm test" buttons and observing response of blood warmer. Breaker test should turn power switch to OFF. An alarm test should cause alarm to sound and display to show temperature exceeding 38°C.

9. Patients receiving transfusion as outpatients or "Short-Stay" admissions are given a copy of "Post-Transfusion Instructions for Outpatients". This form is issued from the BTS when blood is released to patients known to be outpatient or "Short-Stay" admissions.

The current edition of the "Circular of Information for the Use of Human Blood and Blood Components" is available upon request in the Blood Transfusion Service as a reference for laboratory, nursing and medical staff or students.

The blood administration process is randomly monitored by chart review for record completion and by self-evaluation using "Blood Administration Checklist" (Attachment 1). The BTS supervisor reports procedure variances observed to the Blood Utilization Committee and the Nursing Directors.

Approved by:	**Review/Revision Date:**
3-3-09 Robert L. Booth, Jr., M.D. Date Associate Professor Director, Clinical Pathology/Hematopathology	6/96 11/96 1/98 3/99 8/00 3/02 1/05 12/07 6/9/2008 2/27/2009
3/23/09 Mark Chastang Date Vice President & Executive Director	
Review/Revision Completed By: Michelle Bartkowiak, MT(ASCP)SBB	**Next Review Date:** 6/1/2011
Policies Superseded by This Policy:	

It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.

Reference:

1. AABB Standards for Blood Banks and Transfusion Services, Current edition.
2. "Circular of Information for the use of Human Blood and Blood Components", ARC 1751, July 2002
3. Nursing Guidelines for Administration of Blood and Blood Components, UTMC Nursing Policy Manual