LB.69 The medical director of the transfusion services participates (through the blood transfusion committee) in the development of a process for the management of adverse or suspected transfusion events.

LB.69.1 There is a process for the management of adverse transfusion events which covers:

LB.69.1.1 Recognition and handling of adverse transfusion events.

LB.69.1.2 Reporting and monitoring of adverse transfusion events.

LB.69.2 There is a process for management of suspected transfusion reactions which covers:

LB.69.2.1 Clerical check of the identification information and records.

LB.69.2.2 Visual inspection of the blood product, pre and post transfusion samples.

LB.69.2.3 Initial immune-hematological testing and conditions for performing additional testing (minor/major cross-match, urine analysis, biochemistry, microbial culture).

LB.69.2.4 Conclusion and instructions for future transfusion.

LB.69.3 Transfusion reaction reports are reviewed by the transfusion services medical director and the transfusion committee.

Standard Intent:

Hemolytic transfusion reactions (HTR) are primarily caused by an alloantibody in the patient's circulation directed against an antigen on the transfused red blood cells (RBC). HTR following red blood transfusion are of two types: acute (immediate) hemolytic transfusion reactions (AHTR) or delayed hemolytic transfusion reactions (DHTR)

AHTR are life-threatening reactions almost always due to human error in transfusing an ABO incompatible unit. DHTR occurs very rarely as a result of primary immunization but are more frequent following an anamnestic response. When antibodies produced by the primary immune response increase in titer and avidity, they may react with the transfused cells that are still circulating and cause a DHTR. DHTR as the result of primary immunization cannot be prevented because allogenic blood transfusion exposes the recipient to numerous foreign antigens (other than ABO and D, the only antigens matched for transfusion) which are potentially immunogenic. However, DHTR as the result of an anamnestic response can be minimized by keeping accurate records of antibodies produced by the patient and through the use of sensitive techniques for antibody screening.

Some reactions such as febrile and allergic reactions, also known as Non-Hemolytic Transfusion Reactions (NHTR) cannot be eliminated. Although they are not life threatening, they cannot be ignored and they must be distinguished from true HTR because both types of reaction may present with the same symptoms. Therefore, all

transfusion reactions reported must be treated as a STAT procedure. Furthermore, any unexpected investigation results must be reported, expeditiously, to the medical director of the blood bank.

LB.70 The medical director of the transfusion services participates (through the blood transfusion committee) in the development and implementation of a process for the investigation of suspected cases of post-transfusion infection.

LB.70.1 There is a process for the investigation of suspected cases of post-transfusion infection which ensures the following:

LB.70.1.1 Prompt identification of the implicated donors.

LB.70.1.2 Prompt notification of the collecting facility (if applicable).

LB.70.1.3 Prompt quarantine of available components from the implicated donors.

LB.70.1.4 Investigating the implicated donors.

LB.70.1.5 Assigning appropriate deferrals to the implicated donors.

LB.70.1.6 Reporting the investigation results (internally and externally), as applicable.

LB.70.2 The process for investigation of donors subsequently found to have transfusion transmissible disease (Look Back) ensures the following:

LB.70.2.1 Prompt quarantine of available components from the same donor.

LB.70.2.2 Prompt identification of the recipients.

LB.70.2.3 Prompt notification of the facility where the transfusion was conducted (if applicable).

LB.70.2.4 Prompt notification of the patient's physician and/or infection control.

LB.70.2.5 Investigation and follow-up of recipients.

LB.70.2.6 Reporting the investigation results (internally and externally), as applicable.

Standard Intent:

Because the interval between an infected transfusion and onset of disease can be very long, recipients and donors are usually unaware of their infection and may be infectious to others. Also, if a patient develops a Transfusion Transmissible Disease (TTD) after receiving blood or blood component(s), the donor(s) of those units must be traced retested and notified if they show seroconversion.