### Computer Downtime Policy
#### Department of Clinical Laboratories
**The Ohio State University Wexner Medical Center**

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<th>Document Author:</th>
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#### Approval*:
- Laboratory Manager: Manager, Transfusion Services
- Laboratory Compliance Officer: Compliance Officer, Transfusion Services
- Laboratory Division Director: Medical Director, Transfusion Services
- Laboratory Medical Director(s): Medical Director, University Hospital Clinical Laboratories
- Laboratory Medical Director(s): Medical Director, University Hospital East Clinical Laboratories

#### *Approval and Acknowledgements*
Refer to QPulse system and Document Details report for laboratory directors(s)’ electronic signature approval, employee acknowledgment and effective date.
1. POLICY
   1.1. It is the policy of the Transfusion Service to have processes in place in the event of a laboratory/hospital computer system downtime.

2. PURPOSE OF DOCUMENT
   2.1. In the event that a laboratory or hospital computer system is down, this document describes what to do to ensure that before blood components are issued for transfusion, interpretations of current test results are compared with patient records to detect possible discrepancies or potentially dangerous situations.

3. SCOPE OF DOCUMENT
   3.1. This procedure applies to all Transfusion Service personnel, regardless of position.
   3.2. A user name and password must be assigned to the user by the Laboratory Information Systems department in order for the user to access the laboratory computer system.

4. RESPONSIBILITY
   4.1. The Medical Director, Transfusion Service is responsible for:
       4.1.1. Ensuring that policies, processes and procedures are in place to govern the proper use of the laboratory computer system by Transfusion Service personnel.
   4.2. The Manager, Compliance Officer and Lead Technologists, Transfusion Service or their designee are responsible for:
       4.2.1. Implementing, validating and maintaining the laboratory computer system.
       4.2.2. Developing and maintaining the policies and procedures governing the proper use of the laboratory computer system.
   4.3. Transfusion Service personnel are responsible for:
       4.3.1. Following the written procedures for the proper use of the laboratory computer system.
       4.3.2. Preventing unauthorized access to patient information.

5. PROCESS
   5.1. Computer malfunctions and downtime that may impact the Transfusion Service are:
       5.1.1. Ortho Vision computer system
       5.1.2. Hospital Information System
       5.1.3. Laboratory Information System
   5.2. A LIS Systems Manager is on duty 24 hours a day for the laboratory computer system.
       5.2.1. In the event that the laboratory computer system will be undergoing a scheduled period of downtime, the LIS Systems Manager will notify the Transfusion Service so that preparations for computer downtime can be made, if needed.
       5.2.2. If a problem with the laboratory computer system occurs outside of scheduled downtime, contact one of the LIS Systems Managers.
   5.3. Nursing units are responsible for placing orders for testing on the Transfusion Specimen Requisition and sending completed forms to the Transfusion Service.
   5.4. The Transfusion Specimen Requisition must accompany the specimens when sent to the Transfusion Service.
   5.5. Patient specimens will be triaged and worked up based on the following:
       5.5.1. Patient status (Inpatient or Outpatient)
           a. If the specimen is an outpatient specimen and marked STAT, call the location (if open) and verify that the specimen is indeed STAT.
           b. Explain the situation and determine if the specimen may be processed less urgently.
       5.5.2. Patient location
       5.5.3. Severity of need
       5.5.4. Transfusion Service staffing
5.6. During a laboratory computer system downtime, the Transfusion Specimen Requisition must be used to document all of the patient’s information and to record the reactions of all testing performed.

5.6.1. See the Table of Contents in the forms binders for a list of manual forms that can be used.

5.7. Specimen Processing:

5.7.1. When processing specimens during a laboratory computer system downtime, thoroughly check and verify that the patient does not already have a current specimen that has been worked up.

a. Review the current day’s requisitions and contact a lead to request a copy of the daily cross match expiration extract. This extract is emailed to the lead technologists and manager daily and is to be referenced if a downtime occurs.

b. If the check for a current specimen is being performed as part of preparation for the next day’s surgery schedule, requisitions from the previous thirty (30) days must also be reviewed.

5.7.2. If a current sample is found, release any crossmatched units from allocation prior to working up the new sample.

5.7.3. Perform a patient history check by utilizing the Transfusion Service Downtime Patient Database.

a. NOTE: This Access Database is only available at OSU-UH. UHE staff will need to call OSU-UH when the laboratory computer system is non-operational for a patient’s history, as needed. The results will be printed and faxed to UHE

5.7.4. Once the history check has been completed, record on the reverse side of the Transfusion Specimen Requisition on the “SPECIMEN RECEIVED DATE:” line, the date and time that the specimen was received and the technologist’s initials.

5.7.5. ABO/Rh(D) typing:

a. If the Ortho Vision is operational, proceed with processing the specimen as stated in Specimen Processing on the Ortho Vision except:

   - When the laboratory computer system is down, barcode labels will not be available to process specimens on the Ortho Vision and the sample ID numbers will need to be manually entered into the Ortho Vision by:
     - Starting the instrument as a normal process
     - Selecting the type of testing to be performed
     - Clicking on the Samples tab at the top of the box
     - A diagram of the specimen carousel should appear
     - Double clicking on each tube holder in use
     - The Ortho Vision will ask for manual identification of the specimen.
     - Carefully, enter the patient’s medical record number for the specimen identity.
     - The Ortho Vision will ask for reconfirmation of the specimen identity.
     - Carefully, re-enter the patient’s medical record number.
     - Note: Transplant patients who have two specimens drawn during their outpatient visit should not be processed simultaneously during computer downtime as the Ortho Vision will not start a run that has the same specimen identification number present more than once.
     - Print out the Ortho Vision results.
     - Record technologist’s initials and the date on each of the print-outs from the run.

b. If the Ortho Vision is non-operational, process specimens as detailed in the following procedures:

   - Exception: At UHE if the Vision is non-operational all specimens will be sent to UH by STAT Courier.
   - ABO/Rh Tube Typing and Patient/Donor Reconfirmation
   - Antibody Detection/Identification by Gel Card Test Method

b. Record all test results on the reverse side of the Transfusion Specimen Requisition in the appropriate spaces, include interpretations and technologist initials where indicated.
Record ABO/Rh results in the “ABO & Rh. TUBE TYPE” area.

If a Gel antibody screen was performed, record the results in the “Antibody Screen” area.

Write “Gel” in the grid boxes marked “IS” and the testing reactions in the boxes marked “AHG”.

If a LISS antibody screen was performed, record the results in the “Additional Testing” area.

Record “LISS” on the line next to “Additional Testing”.

Record I, II and III across the top of the grid.

Record IS, 37 and AHG at the appropriate areas to the left of the grid.

Record the testing reactions in the appropriate grid box.

Patient’s that are candidates for Rh Immune Globulin are to have “This Patient is a RhIG Candidate” written on the Transfusion Specimen Requisition.

Once the cord blood or heelstick sample arrives and is tested, the mother’s Transfusion Specimen Requisition is marked with the results of the neonate’s testing and whether or not the mother is/is not a RhIG candidate.

Refer to steps 5.10-5.18 for additional processing of RhIG candidate samples and allocation of RhIG.

5.7.6. Antibody Identification:

- Results must be recorded on:
  - Antibody Identification Worksheet Initial Patient Testing
  - Antibody Identification Worksheet Additional Testing/Alternative Techniques
  - Manufacturer’s panel antigrams corresponding to the specific lot number of panel cells
  - The reverse side of the Transfusion Specimen Requisition (interpretation only)

5.7.7. Direct Antiglobulin Testing (DAT):

- Record the results, interpretations and technologist’s initials, where required, on the following:
  - Antibody Identification Worksheet Initial Patient Testing, when performed as part of antibody identification
  - Reference Information Form (if consult not sent):
    - When a DAT was ordered and the DAT is positive
    - When performing a requested cord blood or heelstick workup
  - The reverse side of the Transfusion Specimen Requisition under the section labeled “Direct Coombs”

- Record the results of the patient’s antibody screen/identification or mother’s blood type and antibody screen/identification (if for a cord blood or heelstick) on the forms as well.

5.7.8. Elutions:

- Record the results on the following:
  - The manufacturer’s panel antigram corresponding to the specific lot number of panel cells used to test the eluate
  - Eluate last wash results are recorded on Antibody Identification Worksheet Additional Testing/Alternative Techniques
  - Eluate interpretations are recorded on Antibody Identification Worksheet Initial Patient Testing
  - The reverse side of the Transfusion Specimen Requisition (interpretation only)

5.7.9. Antigen Typing (antigen typing is performed both on patients and on donor units):

- Record results on the following:
  - Antibody Identification Worksheet Initial Patient Testing
  - Extended Red Cell Antigen Typing Worksheet, if performing a full patient phenotype

- Record the results on the following:
  - Antigen Typing Tag
  - Computer Downtime Red Cell Unit Antigen Typing Worksheet
5.7.10. Crossmatching:
   a. **Electronic crossmatches can not be utilized while the laboratory computer system is in
downtime.**
   b. If the antibody screen is negative and the patient has no history of clinically significant
   antibodies, then an immediate spin (IS) crossmatch must be performed.
   c. If the antibody screen is positive or the patient has a history of clinically significant antibodies,
an IS-AHG crossmatch must be performed.
   d. Record crossmatch reactions and interpretations on the reverse of the Transfusion Specimen
   Requisition.
      ▪ Record the donor identification number of the red blood cell unit being crossmatched in the
        “DONOR NUMBER” column.
      ▪ Record the red blood cell ABO/Rh type in the “ABO Rh” column.
      ▪ Record the component code of the unit in the “COMPONENT” column.
      ▪ Record the expiration date of the unit in the “EXP” column.
      ▪ Record the reaction results of the crossmatch performed in the IS, 37°C, and AHG columns
        (as appropriate to the type of the crossmatch performed).
      ▪ Record the interpretation of the crossmatch in the “INTR” column.
      ▪ Record “C” in the column if the crossmatch is compatible.
      ▪ Record “I” in the column if the crossmatch is incompatible.
      ▪ Record the initials of the testing technologist in the column marked “TECH”.
      ▪ Note antigen negative units or charges to be credited by:
        ▪ Using a symbol (■, *, etc.) and denoting what the symbol indicates.

5.7.11. ABO Recheck:
   a. If an ABO Recheck is required on the specimen, place the Transfusion Specimen Requisition
   and the specimen in the ABO Recheck area at the same time.
      ▪ Record the results on the reverse side of the Transfusion Specimen Requisition in the spaces
        marked “SLIDE TYPE”.
      ▪ Record the interpretation and technologist’s initials in the grid boxes next to the “SLIDE
        TYPE” spaces.

5.7.12. Transfusion Reactions:
   a. Record results, interpretations, pathologist instructions and technologist’s initials on the
   following:
      ▪ Report and Investigation of Transfusion Reaction form
      ▪ The reverse of the Transfusion Specimen Requisition (pathologist instructions regarding
        future transfusion only)

5.7.13. Fetal Screens:
   a. Record the results on the reverse side of the Transfusion Specimen Requisition under the section
   marked “ADDITIONAL TESTING”.
      ▪ Label the result grid “Fetal Screen”.
      ▪ Label the first row of the result grid “pos”.
      ▪ Label the second row of the result grid “neg”.
      ▪ Label the third row of the result grid “patient”.
      ▪ Record results in the appropriately labeled result grid box.
      ▪ Record the interpretation and technologist’ initials in the appropriate result grid boxes

5.7.14. Kleihauer-Betke Test (K-B):
   a. Record the interpretation of the test results on the reverse side of the Transfusion Specimen
   Requisition.
   b. Record the testing and controls on the Kleihauer-Betke Quality Control Form
5.7.15. Cold Agglutinin Titer:
   a. Record the results on Cold Agglutinin Screening Worksheet.

5.7.16. Antibody Titer:
   a. Record results on the Antibody Titer Worksheet or ABO Titer Worksheet, as appropriate.

5.7.17. Results of any additional testing are recorded on the reverse side of the Transfusion Specimen Requisition and on various Reference worksheets.

5.7.18. Record any comments or notes that would have been made in the laboratory computer system on the reverse side of the Transfusion Specimen Requisition along with the technologist’s initials and date.

5.8. Blood Component Sign-in:
5.8.1. All blood components received during the laboratory computer system downtime must be signed into inventory using the following protocol.
5.8.2. Check and verify the following information between the actual unit and the packing slip:
   a. The donor identification number
   b. The ABO/Rh
   c. The expiration date
   d. Component product code
5.8.3. After verifying the information on each unit, place a check mark next to the donor identification number on blood supplier’s shipping document.
5.8.4. Write the Transfusion Service component code, technologist’s initials and date on the packing slip.
5.8.5. Record the comment “not entered into the computer” on the packing slip.
5.8.6. Place all non-red blood cell components into the appropriate temperature monitored storage device.
5.8.7. Pull segments for red blood cells.
   a. Make work lists for red blood cells.
      ▪ Assign the work lists as:
      ▪ “WL”, date, number of work lists made so far.
      ▪ For example: the first work list received on June 1st would be WL06011.
5.8.8. Place the red blood cells in the appropriate temperature monitored storage device.
5.8.9. For each work list, complete a Computer-Down ABO/Rh(D) Reconfirmation Worksheet with:
   a. Work list number
   b. Donor identification number
   c. Label ABO/Rh(D) type
   d. Component
5.8.10. Test the segments.
   a. Record the test results, interpretation, technologist’s initials and date on Computer-Down ABO/Rh(D) Reconfirmation Worksheet.
5.8.11. Have a second technologist review both the Computer-Down ABO/Rh(D) Reconfirmation Worksheet and the packing slip.
   a. The technologist reviewing the worksheet and the packing list must date and record their initials by each entry on the Computer-Down ABO/Rh(D) Reconfirmation Worksheet.
5.8.12. After testing has been performed and the results reviewed, place the red blood cell units on the appropriate inventory shelves for availability.

5.9. All blood and blood components prepared during the laboratory computer system downtime must be documented using the following protocols depending on the type of component.

5.9.1. Frozen Component Preparation:
   a. Thaw and label the component.
b. Record the donor identification number, the product code, the ABO/Rh, date, thaw time, and thawing technologist’s initials on the Frozen Blood Component Thawing Worksheet.
   ▪ The technologist completing the blood label check must record their initials in the “Blood Label Check Tech initials” column.

5.10. Review of Orders for Blood Components and RhIG:

5.10.1. On the order for blood components or RhIG, record the date and time the order was received and the technologist’s initials.

5.10.2. Look up the patient’s history using the Transfusion Service Downtime Patient Database.

   a. NOTE: This Access Database is only available at OSU-UH. UHE staff will need to call OSU-UH when the laboratory computer system is non-operational for a patient’s history, as needed. The results will be printed and faxed to UHE

5.10.3. Look at the most current “crossmatch expiration” report (can be obtained from a lead technologist) for patients with current samples.

5.10.4. If the order matches the patient’s special needs, check to see if the patient has a current specimen as in 5.7.
   a. If the patient has a current specimen and it was drawn after the start of laboratory computer system downtime, then the patient’s Transfusion Specimen Requisition will be in the front area.
   b. If the patient has a current specimen and it was drawn before the start of the laboratory computer system downtime, then there will not be a Transfusion Specimen Requisition.
      ▪ In this case, obtain a new Transfusion Specimen Requisition and record the following on it:
        ▪ Patient’s full name on the top of the front side
        ▪ Patient’s MRN underneath the name on the top of the front side
        ▪ The date drawn and phrase “Received” at the bottom of the Transfusion Specimen Requisition
        ▪ Record the interpretation of the ABO/Rh typing on the reverse side in the appropriate box and add technologist’s initials.
        ▪ Record the interpretation of the Antibody Screen in the appropriate box and add technologist’s initials.
        ▪ Attach a Blood Bank Extract printout of the patient’s history per step 5.7.3.
   c. If the patient does not have a current specimen, place the transfusion order in the appropriate “orders pending” folder in the rolling cart file in the back area at UH or place the transfusion order on the Transfusion Service counter at UHE.
   d. If the order does not match the patient’s special needs, contact the patient’s clinical care provider to correct the order.

5.10.5. Once the order for transfusion matches the patient’s special needs history and the patient has a current sample tested, blood components can be allocated.

5.11. Allocating Blood Components:

5.11.1. Allocating Red Blood Cells
   a. Record the red blood cell unit information on the reverse side of the Transfusion Specimen Requisition.
Record the donor identification number of the unit being allocated in the “Donor Number” column.
- Record the ABO/Rh in the “ABO/Rh” column.
- Record the component code in the “Component” column.
- Record the expiration in the “EXP” column.
- Record the initials of the technologist allocating the unit in the “TECH” column.

b. All red blood cells allocated during a computer downtime must have a serological crossmatch performed, unless the red blood cells are for a newborn that would not have required a crossmatch during normal operations.
   - Refer to step 5.7.10.

c. Complete a crossmatch tag for each allocated unit per step 5.12.
   - If crossmatching a red blood cell for a neonate, complete the crossmatch tag for the parent unit

d. Perform a Technical Label Check per step 5.13.

5.11.2. Allocating Non-Red Blood Cell Components and RhIG

a. Record the non-red blood cell component or RhIG information on the reverse side of the Transfusion Specimen Requisition.
   - Record the donor identification number of the unit or vial of RhIG being allocated in the “Donor Number” column.
   - Record the ABO/Rh in the “ABO/Rh” column (not applicable for RhIG).
   - Record the component code in the “Component” column.
   - Record the expiration in the “EXP” column.
   - Record the initials of the technologist allocating the unit in the “TECH” column.

b. Complete a crossmatch tag for each allocated unit per step 5.12.

c. Perform a Technical Label Check per step 5.13.

5.12. Complete a crossmatch tag:

5.12.1. Record the patient’s full name in the space marked “NAME” on the tag.

5.12.2. Record the patient’s medical record number in the space marked “HOSPITAL NO” on the tag.

5.12.3. Record the unit’s blood type and the patient’s blood type in the shaded box in the upper left corner of the tag marked “PATIENT TYPE/DONOR TYPE”.

5.12.4. Record the donor identification number in the space on the tag marked “DONOR NO”.

5.12.5. Record the component name (in words, do not use component codes) in the space on the tag marked “COMPONENT”.

5.12.6. Record “Compatible”, “Incompatible” or “ND” in the space marked “CROSSMATCH”, as appropriate for the component being tagged.

5.12.7. The technologist, who allocated the component, will also date and initial in the spaces, next to “CROSSMATCH”, marked “TECH” and “DATE”.

5.12.8. Write antigen typing or required unit comments in the area of the crossmatch tag marked “COMMENTS”.

5.13. Perform a Technical Label Check (TLC):

5.13.1. In addition, the following items must be present during the TLC in order to be able to thoroughly check the patient’s history and special needs that the patient may have (i.e., irradiated, CMV negative, freshest products available, etc.):
   a. The Blood and Blood Component Order.
   b. The Transfusion Specimen Requisition
      - Refer to the front of the Transfusion Service Requisition for the patient’s name and medical record number.
      - Refer to the attached Blood Bank Extract printout and the reverse side of the Transfusion Specimen Requisition for the results of the patient’s typing, antibody screen, crossmatch results, antibody history, and special needs (if any.)

5.14. Call the patient’s current location to inform them that the component is ready for pick-up.
5.14.1. Record the following on the transfusion order:
   a. The date and time that the floor was called
   b. The name of whom answered the call
   c. The number of products ready, if not in the amount specified on the order
   d. The initials of the technologist placing the call

5.14.2. Paperclip the transfusion order to the Transfusion Specimen Requisition and file the transfusion order in the appropriate “orders ready” folder of the rolling cart file at the front desk at UH or in the “transfuse” file at UHE.

5.15. Issuing of Blood Components and RhIG:

5.15.1. A Blood/Blood Component Request Form-Down Time with the patient’s name, medical record number, date, time, the quantity and type of component that is to be given must be delivered to Transfusion Services. IHIS release forms (Prepare to Transfuse) are acceptable to use if IHIS is not affected by the down time.

5.15.2. Carefully, compare the transfusion order, the Blood/Blood Component Request Form- Down Time or IHIS release form and the patient’s history as recorded on the Transfusion Specimen Requisition by checking:
   a. The patient’s full name
   b. The patient’s medical record number
   c. The patient’s special needs
   d. The patient’s history and typing problems
   e. The patient’s ABO/Rh type
   f. The patient’s antibody screen and/or antibody identification

5.15.3. If there is any discrepancy between the information on the Blood/Blood Component Request Form- Down Time or IHIS release form and the information on the other Transfusion Service documents (i.e., Blood and Blood Component Order form, Transfusion Specimen Requisition), the discrepancy must be resolved prior to the release of blood components.

5.15.4. Record the following on the crossmatch tag prior to giving the component to the courier or tubing it to the floor:
   a. Initials of technologist issuing the unit
   b. Date and time the component was issued

5.15.5. Remove the middle copy from the crossmatch tag for all units being issued.
   a. Write the employee identification number of the courier picking up the unit or responsible for retrieving it from the tube system when tubing units on the middle copy of the crossmatch tag.
   b. Keep the middle copy of the crossmatch tag at the front desk until the computer system is operational and the units can be issued in the computer.

5.15.6. To document units were issued on the line for the units in the “Disposition” column on the Transfusion Specimen Requisition.
   a. Record technologist initials and date.

5.15.7. Record the following information on the transfusion order:
   a. Number of units being issued
   b. The name of the blood component issued
   c. Date and time unit was issued

5.15.8. Have the courier or second tech confirm the correct patient, component and quantity have been issued.

5.16. Return of Blood Components and RhIG:
5.16.1. Perform the following steps to return and reissue blood components when the computer system is down. Refer to Return and Reissue of Blood Components procedure for the criteria of acceptable products.
   a. Document in the “DISPOSITION” column on the reverse side of the Transfusion Specimen Requisition for any issued units that are returned to the Transfusion Service.
   b. If the units were issued prior to the start of computer downtime:
      • Physically segregate (quarantine) the blood component or RhIG and notify a Lead Technologist.
      • A Lead Technologist will ensure the proper status update is made to the unit following the laboratory computer downtime.

5.17. Record Keeping:
5.17.1. Once testing has been completed, the Transfusion Specimen Requisitions are to be kept segregated in an organized fashion, until the computer system is operational and all testing can be entered into the computer system.
   a. Segregate the Transfusion Specimen Requisitions of RhIG candidates into a separate section.
      • When the patient is determined to no longer be a RhIG candidate, the patient’s Transfusion Specimen Requisition can be filed as in step 5.17.1.
      • If the patient is to receive RhIG, paperclip the patient’s RHEV Transfusion Specimen Requisition to the original Type and Cross Transfusion Specimen Requisition until the vial of RhIG is issued, then the Type and Cross Transfusion Specimen Requisition can be filed as in step 5.17.1 and the RHEV Transfusion Specimen Requisition filed as complete.

5.17.2. Once testing has been performed on the PAT specimens, the Transfusion Specimen Requisitions are kept segregated in an organized fashion until the computer system is operational and all testing can be entered into the computer system.

5.17.3. Orders for transfusion that are waiting sample collection should be placed in the testing area file at UH and on the Transfusion Service counter at UHE.

5.17.4. Orders for transfusion that have been completed or cancelled are to be filed in the appropriately labeled file.

5.17.5. Depending on the length of the laboratory computer system downtime, it may be necessary to review the Transfusion Specimen Requisition files nightly to pull expiring specimens.
   a. Once the expiring Transfusion Specimen Requisitions have been removed, there are several steps that need to be performed:
      • Withdraw any units still allocated to these expired requisitions.
   b. Place the expired Transfusion Specimen Requisitions in alphabetical order by the first letter of the patient’s last name in a Lead Technologist’s (whoever has been assigned to perform the review) mailbox for review.
   c. The Lead Technologist will place the Transfusion Specimen Requisitions in the proper box for scanning after the review is completed.

5.17.6. Any problems that would normally require a Laboratory Release-Unacceptable Specimen or Occurrence Report to be completed must have the appropriate form completed during a laboratory computer downtime.

5.18. Administrative Data Entry During Downtime:
5.18.1. If a patient’s administrative data (AD) or Blood Bank Administrative Data (BAD) needs to be changed while the laboratory computer system is down, the following must be done:
   a. The tech making the changes will record them on the Release From Standard Procedure form.
b. Record the same information from step 5.18.1.a on the patient’s Transfusion Specimen Requisition.
c. Once the laboratory computer system downtime has ended, a Lead Technologist or designee must enter the changes into the laboratory computer system via the “Administrative Data Entry” or “Blood Bank Administrative Data Entry” function.
d. Once the AD or BAD has been updated, the Lead Technologist or designee must initial and date the Release From Standard Procedure form to indicate that the AD update has been done.

5.19. IHIS Computer Downtime:
5.19.1. Floors are responsible for completing the Transfusion Specimen Requisition and sending completed forms and specimens to the Transfusion Service.
5.19.2. The Transfusion Service personnel will order the appropriate tests in the laboratory computer system, if it is not down at the same time as the IHIS computer system.
5.19.3. Test results will not cross over into other hospital patient information systems.
   a. The Transfusion Service must call the following results to the floors:
      - Any Transfusion Service Critical Values.
      - DAT results on BMT specimens drawn 30 minutes post infusion.
      - Bone marrow or other hematopoietic progenitor cell products listed in the ABO/Rh(D) Typing and Crossmatch for BMT Service and Laboratory procedure.
      - Recipient samples for crossmatching with bone marrow or other hematopoietic progenitor cell products.
      - ABO/Rh typing for LOOP specimens.
      - The Blood Product Administration module in IHIS will not function if either the laboratory computer system or the hospital information system is not running.
5.19.4. The floor must be notified of any delay in the availability of red blood cells in the event that a patient’s antibody screen result demonstrates a new unexpected antibody or if the antibody identification is not complete when orders to transfuse arrive.
5.19.5. If the laboratory computer system is also experiencing downtime, refer to steps 5.6. through 5.18. of this procedure.

5.20. HemaTrax System is Non-Operational (Sunquest operational):
5.20.1. The blood components that are affected when the HemaTrax system is non-operational are the plasma products.
   a. Attach a “Thawed Plasma Frozen within 24 Hours After Phlebotomy” label directly on the face label in the lower left quadrant with the ml’s filled in using indelible ink. Leave the label flagged so a second technologist can perform a Blood Label Check.
5.20.2. No aliquots of red blood cells will be made during this time. If a transfusion is needed for a neonate, transfuse the entire red cell unit appropriate for the neonate.

5.21. Results and interpretations of all testing, component receipt, component preparation, component allocation, and component issuing, billing and crediting charges must be entered into the laboratory computer system once the downtime has ended.
5.22. All results and interpretations entered into the laboratory computer system following a laboratory computer system downtime must be reviewed by a Lead Technologist or designee for completeness and accuracy.

6. REFERENCES
6.2. AABB. Standards for Blood Banks and Transfusion Services. Bethesda, MD: AABB, Current Version
6.4. FDA. Code of Federal Regulations. Rockville, MD: FDA, Title 21, Parts 200 and 600, Current Version

7. RELATED DOCUMENTS
7.1. Refer to QPulse System or Document Detail Report for related Laboratory Policies, Procedures, and Master Forms