**SUBJECT: Send-outs to ARC reference lab**

**1.0 Scope**

This policy applies to all blood bank testing personnel.

**2.0 Policy**

To identify any unknown antibodies and resolve any cross match or blood typing problems.

**3.0 Procedure M-F 0800-1700 only**

3.1 SPECIMEN REQUIREMENTS:

3.1.l Send at least l0 cc (preferably l5 cc) of clotted blood with serum and cells separated and one 5 ml EDTA tube. Freeze the serum if there is to be a delay in sending the sample. Specimens should be sealed securely with stoppers.

3.1.2 Label the specimens legibly with the patient's name, ID number, and date drawn (pre‑ and post‑ if applicable).

3.1.3 Place the tubes in a three-tube mailing container.

3.1.4 If sending unit segments (to enable the ARC to screen our units for antigens), send l or 2 segments from each unit sent. Send segments from more units than needed, in case some of the units are incompatible. ARC will report the segment number, and the unit number, when they call back the report (they are different).

3.2 PROCEDURE:

3.2.l Complete a new order in ARC’s Bloodhub selecting services. Step through all of the prompts answering the questions with as much information as is available. When complete send the order and print two copies of the invoice.

3.2.2 Keep a copy of the completed form in blood bank. Send one copy of the invoice along with a copy of the Antigram Antigen Profile to ARC with the specimen. Our copy of the Reference Laboratory Request form should be scanned along with the final ARC report once received.

3.2.3 Arrange for transportation to take the specimen to ARC. Utilize our JTDMH service for this (MATMGT014 Courier Call) or if during the week a delivery driver from ARC is in the Lima area each afternoon and the reference lab at ARC can arrange for this driver to transport the specimen to Fort Wayne.

3.2.4 Notify ARC Laboratory before the sample is sent to describe the situation and how and when the specimen will arrive. Keep ARC informed of the patient's condition (when an emergency becomes a non‑emergency and vice versa).

3.2.5 Inform the appropriate people that a sample has been sent to the ARC. For inpatients and Outpatient-Ambulatory Services patients, notify the floor. For outpatients, notify the physician's office.

**Note**: NO BLOOD should be transfused before the problem is resolved. In an emergency where time is a critical factor, the physician MUST sign for cross match compatible blood using an Emergency Release form.

3.3 RESULTS:

3.3.l The ARC Reference lab will call back the results. If a cross match is involved, they will give us the unit segment numbers of the compatible units. They will give us only the number of units that we requested. If none of the units segments were submitted for are compatible, reference will arrange with distribution to send units to JTDMH.

3.3.2 Upon receiving the phoned results:

3.3.2.1 If a cross match is involved, document on the voucher the name of the antibody(s) found and that the unit is negative for that antibody(s). Label the unit with the antigen information if the unit is one already maintained at JTDMH. Any pre-screened units received from another blood bank will already have antigen identification information attached to the unit so additional labeling is not necessary. Example: "Patient has Anti‑Kell, unit is Kell neg per ARC. Call the floor and inform them that the blood is ready to be transfused. Also document in the electronic disposition, under the appropriate unit number, that the unit is negative for a particular antigen and in the workbook next to the IDC results. Example: "Kell negative per ARC."

3.3.2.2 Fill in the antibody information on the patient's blood bank file card and in the patient comment in patient maintenance in the LIS.

3.3.3 Upon receipt of the ARC written report:

3.3.3.1 If an inpatient: Scan the report into the patient’s order and then forward the original to the chart.

3.3.3.2 If an outpatient: Scan the original into the patient’s order and send the original to the clerk.

3.4 BILLING:

3.4.1 Mark all appropriate charges on the ARC antibody identification work-up form (i.e. antigen typing, antibody identification, etc.). Send the original to data processing and save a copy for scanning to the patient’s order.

3.5 NOTES:

3.5.l For transfusion reactions: Pre‑ and post‑transfusion specimens and a sample of the unit(s) transfused must be sent.

3.5.2 For HDN cases: Send samples from the father, mother, and the baby. Indicate whether the jaundiced baby was premature.

3.5.3 Consult ARC Reference if additional assistance is indicated.

**4.0 Procedure any time outside of M-F 0800-1700**

4.1 SPECIMEN REQUIREMENTS:

4.1.l Send at least l0 cc (preferably l5 cc) of clotted blood with serum and cells separated and one 5 ml EDTA tube. Freeze the serum if there is to be a delay in sending the sample. Specimens should be sealed securely with stoppers.

4.1.2 Label the specimens legibly with the patient's name, ID number, and date drawn (pre‑ and post‑ if applicable).

4.1.3 Place the tubes in a three-tube mailing container.

4.1.4 If sending unit segments (to enable the ARC to screen our units for antigens), send l or 2 segments from each unit sent. Send segments from more units than needed, in case some of the units are incompatible. ARC will report the segment number, and the unit number, when they call back the report (they are different).

4.2 PROCEDURE:

 During times outside of normal business hours (M\_F 0800-1700) ARC reference has implemented a procedure for consultation between the on-call pathologist (also termed Transfusion Service Medical Director or TSMD) for JTDMH and the ARC physician. Using the tool provided by ARC reference (After-hours Patient Urgency Assessment Tool, MFBB325) assessment of the urgency of the testing needs is completed and information provided to the pathologist on call. **Be prepared to scan the document and email it to the pathologist on-call if necessary.**

From ARC reference:

BEFORE ordering a STAT EMERGENT work-up in ARC Connect, please notify your Transfusion Service Medical Director (TSMD) and assess urgency based on the criteria listed below (see MFBB325). If the after-hours workup is deemed emergent by the TSMD, a discussion between the TSMD AND the American Red Cross (ARC) Physician is required. ARC Physician approval is REQUIRED for after-hours testing. Please contact the ARC Physician at 501-554-2166.

If the TSMD and ARC Physician discussion determines the case to be emergent, proceed with placing the service order in Connect and upload the approved and completed urgency assessment tool form to the Connect service order.

4.2.l Complete a new STAT EMERGENT order in ARC’s Bloodhub selecting services. Step through all of the prompts answering the questions with as much information as is available**. Be certain to upload the ARC physician signed Assessment Tool.** When complete send the order and print two copies of the invoice.

4.2.2 Keep a copy of the completed form in blood bank. Send one copy of the invoice along with a copy of the Antigram Antigen Profile to ARC with the specimen. Our copy of the Reference Laboratory Request form should be scanned along with the final ARC report once received.

4.2.3 Arrange for transportation to take the specimen to ARC. Utilize our JTDMH service for this (MATMGT014 Courier Call) or if during the week a delivery driver from ARC is in the Lima area each afternoon and the reference lab at ARC can arrange for this driver to transport the specimen to Fort Wayne.

4.2.4 Notify ARC Laboratory before the sample is sent to describe the situation and how and when the specimen will arrive. Keep ARC informed of the patient's condition (when an emergency becomes a non‑emergency and vice versa).

4.2.5 Inform the appropriate people that a sample has been sent to the ARC. For inpatients and Outpatient-Ambulatory Services patients, notify the floor. For outpatients, notify the physician's office.

**Note**: NO BLOOD should be transfused before the problem is resolved. In an emergency where time is a critical factor, the physician MUST sign for cross match compatible blood using an Emergency Release form.

4.3 RESULTS:

4.4.l The ARC Reference lab will call back the results. If a cross match is involved, they will give us the unit segment numbers of the compatible units. They will give us only the number of units that we requested. If none of the units segments were submitted for are compatible, reference will arrange with distribution to send units to JTDMH.

4.4.2 Upon receiving the phoned results:

4.4.2.1 If a cross match is involved, document on the voucher the name of the antibody(s) found and that the unit is negative for that antibody(s). Label the unit with the antigen information if the unit is one already maintained at JTDMH. Any pre-screened units received from another blood bank will already have antigen identification information attached to the unit so additional labeling is not necessary. Example: "Patient has Anti‑Kell, unit is Kell neg per ARC. Call the floor and inform them that the blood is ready to be transfused. Also document in the electronic disposition, under the appropriate unit number, that the unit is negative for a particular antigen and in the workbook next to the IDC results. Example: "Kell negative per ARC."

4.4.2.2 Fill in the antibody information on the patient's blood bank file card and in the patient comment in patient maintenance in the LIS.

4.4.3 Upon receipt of the ARC written report:

4.4.4.1 If an inpatient: Scan the report into the patient’s order and then forward the original to the chart.

4.4.4.2 If an outpatient: Scan the original into the patient’s order and send the original to the clerk.

4.4 BILLING:

4.4.1 Mark all appropriate charges on the ARC antibody identification work-up form (i.e. antigen typing, antibody identification, etc.). Send the original to data processing and save a copy for scanning to the patient’s order.

4.5 NOTES:

4.5.l For transfusion reactions: Pre‑ and post‑transfusion specimens and a sample of the unit(s) transfused must be sent.

4.5.2 For HDN cases: Send samples from the father, mother, and the baby. Indicate whether the jaundiced baby was premature.

4.5.3 Consult ARC Reference if additional assistance is indicated.

**5.0 References:**

ARC Reference, American Red Cross, Fort Wayne, IN.

**Policy Review: Deny Morlino, MT**

 **Immunohematology Lead Technologist**

**Date: 9/18/2023**

**Policy Approval: Dr. Elsa Malcolm, MD**

 **Laboratory Medical Director**

**Date: 9/19/2023**