

TYPE AND SCREEN

Test Code: TYSC

I. PRINCIPLE

Type and screen is the procedure in which the patient's blood sample is typed for ABO and Rh and tested for unexpected antibodies and held in the blood bank for immediate crossmatching should this prove necessary. Units are typically not crossmatched for the patient. However, if the patient has an unexpected antibody, antigen negative units will be available.

NOTE: A type and screen is also done on patients who have autologous units on hand for surgery in the event the patient may need additional homologous units.

II. SPECIMEN

Plasma and red cells from a pink top tube are to be used. The sample should be no more than three (3) days old at the time of potential transfusion. (The day of the sample draw is day zero.) Exception: Outpatient presurgical specimens may be used up to seven (7) days, if the patient has not been pregnant or transfused within the previous three months. At the time of specimen collection, a blood bank armband with the patient's first, middle initial and last name, date of birth, and/or Medical Record number should be placed on the patient wrist (this is in addition to the hospital identification bracelet). The specimen tube should have the patient's first and last name, date of birth or Medical Record number, blood bank armband number, collection date, collection time, and the initials of the phlebotomist.

III. PROCEDURE:

- A. Confirm patient's specimen identity with the type and screen requisition.
- B. Separate the patient's plasma (after centrifugation for 5 minutes at 2000 rpm) to a properly labeled (patient's first and last name, date of birth, and/or Medical Record number, and BB id band number) and dated tube.
- C. Determine the patient's ABO and Rh type. Verify with previous records, if available (Check SunQuest-Pekin, Proctor, and Methodist, Paragon-while still available, and our old card file).
- D. Do an indirect coombs (antibody screen) on the patient's plasma (do auto control).
- E. Determine that there is adequate stock of the patient's type on hand should transfusion become necessary.
- F. If the antibody screen is positive, a cell panel is done to identify the unexpected antibody. If the antibody cannot be identified, send the specimen to the Red Cross for identification.
- G. If the patient has a cold auto antibody, perform the Prewarmed Procedure for the antibody screen.

- H. If an antibody is present, antigen type units to find two that are antigen negative for the corresponding antibody. Antigen negative units can be obtained from the Red Cross, if needed.
- I. Check autologous blood log. If patient has autologous blood available, place a **green card with patient's name** and date of surgery with the unit(s) on autologous shelf in Blood Bank refrigerator.
- J. If special screened blood is needed, obtain it prior to the day of surgery and indicate that it is being held for a specific patient by placing a 3 x 5 card with the patient's name and date of surgery in the holder with the unit.
- K. If surgery notifies the blood bank that blood is needed, proceed with crossmatch procedure immediately.
- L. If the need for blood is urgent, the immediate spin crossmatch may be done (any patient with a positive antibody screen must have a complete crossmatch, including coombs).
- M. Recap or cover the specimen and store at 2 - 8° C for 14 days in the blood bank refrigerator.

IV. REPORTING RESULTS

A. Fill out type and screen request in SunQuest (BOP) completely and immediately after reading tube reactions for:

1. Patient's ABO and Rh type (reaction grids and interpretation).
2. Patient's indirect coombs/antibody screening (reaction grids and interpretation).
3. Add on a Rh control with the "c" key and an Auto control with the "a" key.
4. Scan in Blood Bank ID Band number on the corresponding line.
5. Check patient's Blood Bank history appropriately. Use the "V" key to place the word "Done" on the History Check line, if the patient has a Blood Bank history with a previous blood type on file. If there is a discrepancy in blood types, an investigation must be performed/reconciled, and documented on the Typing Discrepancy Log (see UPPK BB-0553.01). If no history is found, type "No history, ABO/Rh confirmation needed before transfusion" on the History Check line.
6. Add on any other pertinent testing, such as antibodies, antigen typing, etc.
7. Record on the "Note" line in (BOP) patient's surgery date and if patient has autologous units on hand.
8. SunQuest automatically fills in a 3 day expiration date (from the date of draw) on the crossmatch expiration line. If resulting a Type and Screen on an outpatient who has not been pregnant or transfused within the previous 3 months, change the crossmatch expiration date to 7 days from the date of draw.

B. Fill out Blood Bank RECORD SHEET including:

1. Date.
2. Patient's first and last name, Location (OTA, 4N, O/P, etc), Medical Record number, and check mark the appropriate box for the testing that was performed.


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- 3. Results of reactions only need to be written on record sheet during a computer downtime (graded per UPPK BB-0619 policy).
- 4. Your initials.

V. REFERENCES

- A. AABB, Technical Manual, 19th Edition, American Association of Blood Banks, Bethesda, MD, 2017.

POLICY CREATION :		<i>Date</i>
Author:	Sharrol Brisbin, MT (ASCP)	02/01/1992
Medical Director:	Sheikh, MA, MD	02/01/1992

MEDICAL DIRECTOR		
DATE	NAME	SIGNATURE
11-27-18	Kathryn O. Kramer MA	
SECTION MEDICAL DIRECTOR		

REVISION HISTORY (began tracking 2011)			
Rev	Description of Change	Author	Effective Date
01/24/18	3 Days & 7 days for Outpatient Presurgical	Jenny Turner	1/24/18
11/24/18	Added Sunquest information	Jenny Turner	11/24/18

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Effective Date: 11/24/18
Date Reviewed/ Date Revised: 01/24/2018

Reviewed by

Lead	Date	Coordinator/ Manager	Date	Medical Director	Date
<i>Jennifer...</i>	11-21-18				