

## 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.

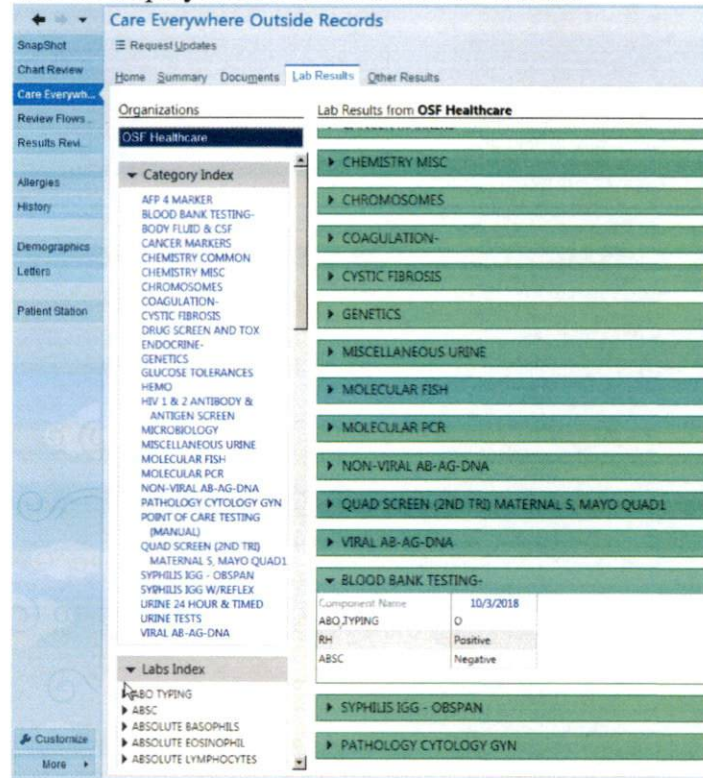
### II. SPECIMEN

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). If a patient has a blood bank armband that still has labels on it, that same armband may be used for labeling additional blood bank tubes that may need to be collected after previous blood bank specimens have expired. 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 3500 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 blue screw top, pour off tube.
- C. Determine the patient's ABO and Rh type. Verify with previous records, if available. Check SunQuest (Pekin, Proctor, and Methodist) along with *Care Everywhere* in Epic for any blood bank testing at other hospitals. (See below for instructions on how to check *Care Everywhere*.)
  1. Go to Epic, click Pt.Station.
  2. Type in the patient's name and choose the correct patient (by DOB and/or MR#).
  3. In the upper left hand corner, click *Care Everywhere* to see any other hospital records for the patient that are available.
  4. Click on LAB Results (green box next to the other hospitals listed, if any)

5. On the left side of the screen, choose Blood Bank testing. Any results available will be displayed in the middle of the screen.



- D. Perform an ABO/Rh control on all AB Positive patients.
- E. Do an indirect coombs (antibody screen) on the patient's plasma.
- F. Determine that there is adequate stock of the patient's type on hand should transfusion become necessary.
- G. If the antibody screen is positive, a cell panel is done to identify the unexpected antibody. Perform an auto control when setting up the panel cells. If auto control is positive, perform a DAT. If the antibody cannot be identified, send the specimen to the Red Cross for identification.
- H. If the patient has a cold auto antibody, perform a prewarmed antibody screen.
- I. 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.
- J. 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.
- K. 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.



- L. If surgery notifies the blood bank that blood is needed, proceed with crossmatch procedure immediately.
- M. If the need for blood is urgent, the immediate spin crossmatch will be done on patients that have a negative antibody screen and have no history of any antibodies. Patients with a positive antibody screen or a history of an antibody must have a complete coombs crossmatch .
- N. 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 an ABO/Rh control with the "c" key to AB Positive patients.
  - 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, type the patient's historical type on the next line down. 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.
  - 3. Results of graded reactions only need to be written on record sheet during a computer downtime (UPPK BB-0619 policy).
  - 4. Your initials.

#### V. REFERENCES

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

UnityPoint Health Pekin  
 Department of Pathology  
 Pekin, IL 61554

Effective Date: 05/12/19  
 Date Reviewed/ Date Revised: 09/03/19

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

<b>MEDICAL DIRECTOR</b>		
DATE	NAME	SIGNATURE
9/10/19	Jon Rasm	[Signature]
<b>SECTION MEDICAL DIRECTOR</b>		

<b>REVISION HISTORY (began tracking 2011)</b>			
Rev	Description of Change	Author	Effective Date
01	3 Days & 7 days for Outpatient Presurgical	Jenny Turner	1/24/18
02	Added Sunquest information	Jenny Turner	11/24/18
03	Added using same BB ID band for additional draws, deleted checking Paragon and old card file for history.	Jenny Turner	05/03/19
04	Added checking Epic Care Everywhere for patient history and instructions.	Jenny Turner	05/12/19
05	ABO/Rh control to only AB Positive patients. Auto control deleted from AB screen, moved to AB panels.	Jenny Turner	9/3/19

Reviewed by:

Lead	Date	Coordinator/ Manager	Date	Medical Director	Date