# **OhioHealth Laboratory Services**

# **Transfusion Services**

Problem Solving Competency 2025

Please note: the quiz is to be placed into MTS (MedTraining System) for each site. We have a variety of activity menus making the quiz slightly different for each site. The passing score is 80%.

**Specimen Processing:**

1. Specimens older than 3 days will not be retrieved for crossmatching except in the cases below:
   1. There are no exceptions to this rule
   2. Preadmission testing patients who haven’t been pregnant or transfused in the last 3 months.
   3. Specimens for problem patients at the discretion of the medical director.
   4. B and C
      1. TXS-PT-01
2. What items should be reviewed during a history check?
   1. Check for a current specimen
   2. Check the type of the patient
   3. Review any special requirements and notes
   4. Review the A/D/R button and labs if bolded
   5. Review any antibody history
   6. All of the above
      1. TXS-PT-02

**Gel ABORh, ABSC and Weak D:**

1. MTS ABD Monoclonal and Reverse Grouping Cards can be stored at which temperature range?
   1. 2-8 ˚C
   2. 18-25 ˚C
   3. 1-6 ˚C
   4. 2-25 ˚C
      1. TXS-QC-04
2. The following results were obtained in a gel ABD forward and reverse typing card. What would be recorded as the interpretation in BBS for the initial gel type?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Anti A | Anti B | Anti D | Control | A1 Cells | B Cells |
| 0 | 3+ | 0 | 2+ | 4+ | 0 |

1. B neg
2. INV
3. B pos
4. A neg
   1. TXS-BT-02

**Tube DAT:**

1. A physician ordered a POLYDAT on a patient. Which of the following is performed for ALL POLYDAT testing?
   1. History check
   2. IgG DAT
   3. C3 DAT
   4. None of the above
      1. TXS-ST-02
2. The quality control for a POLYDAT in tube requires the following:
   1. 1 negative control, 1 positive control
   2. 2 negative controls, 1 positive control
   3. 2 positive controls, 2 negative controls
   4. 2 positive controls, 1 negative control
      1. TXS-QC-06, TXS-ST-02

**Crossmatching:**

1. A crossmatch is completed by the buffered and anti-IgG gel card method. The detection of ABO incompatibility with donor red cells is detected in \_\_\_\_ microtube. The detection of IgG antibodies occurs when the sensitized RBCs react with \_\_\_\_ in the microtube.
   1. anti-IgG gel, buffered gel card
   2. anti-IgG gel, anti IgG gel
   3. buffered gel card, buffered gel card
   4. buffered gel card, anti-IgG gel
      1. TXS-CT-03
2. There is a **downtime** in the BBS. Based on the patient’s results, which type of crossmatch should be performed? Screening cell 1 and 2 are negative (0) in gel. The patient has no antibody history.
   1. Immediate spin crossmatch
   2. Electronic crossmatch
   3. Gel crossmatch
   4. A and B
      1. TXS-CT-02, 04
3. A patient has a history of Anti-Lea. The current screen is negative. Which type of crossmatch can be performed based on these results?
   1. Electronic crossmatch
   2. Gel crossmatch
   3. LISS crossmatch
   4. PeG crossmatch
      1. TXS-CT-05 (remember to deactivate the antibody and add a note that it is **deactivated!)**

**Component Issue:**

1. 2 units are being issued in SafeTrace. Before completing the process, a \_\_\_\_ color banner with the number of units appears in SafeTrace to verify that both units were issued.
   1. Green
   2. Blue
   3. Red
   4. Yellow
      1. TXS-CI-01
2. What products can be emergency issued?
   1. RBCs
   2. Plasma (thawed or liquid)
   3. Platelets
   4. Cryo
   5. All of the above
      1. EM-0003
3. A male patient has a previous history of type A positive, and the nurse is asking for type specific RBCs. The type isn’t completed but they need the products emergency issued. True or False: Can you give the patient A positive RBCs?
   1. True
   2. False
      1. TXS-EM-0003
4. You get a call from the ED that a male patient with no previous history needs two units of RBCs emergency issued. A tech grabs two O positive units to emergency issue. Is this a suitable product that the tech chooses to give?
   1. Yes
   2. No
      1. TXS-EM-0003
5. An O Positive RBC was emergency issued to a patient. The patient’s type was A negative and the screen as negative. Which of the following actions need to be performed?
   1. Call the TS pathologist, order a consult, complete the intervention form
   2. Email TS pathologist, order a consult, complete the intervention form
   3. Call the site leader, email TS pathologist, order a consult, complete the intervention form
   4. No follow-up is needed
      1. TXS-fGI-0041

**Quality Control/Error Correction:**

1. A freezer was being repaired due to a temperature fluctuation and taken out of service. In order to place the freezer back into service which of the following statements is correct?
   1. Monitor and record the temperature for 24 hours after the repair was completed
   2. Complete alarm checks
   3. Once the correct temperature is reached, the products can be returned to the freezer
   4. A and B
   5. A and C
      1. TXS-QC-27
2. Ohh noo! The refrigerator just alarmed, and we need to move blood products and reagents to another refrigerator ASAP. What would be the appropriate temperature range of the refrigerator for both blood products and reagents?
   1. 2-6 ˚C
   2. 2-8 ˚C
   3. 2-10 ˚C
   4. 1-6 ˚C
      1. TXS-QC-20
3. The chart recorder and actual temps of the freezer differ by 3˚C and the freezer is in the defrost cycle. What should be done as the first course of action?
   1. Nothing, a temperature difference of 3˚C is acceptable.
   2. Notify the manger that the freezer is dysfunctional.
   3. Take the temperature again when the defrost cycle is completed.
   4. Move blood products, the freezer is considered “out of Service”.
      1. TXS-QC-03
4. A tech caught their own error while writing the lot number on a QC form. What is the proper way to correct the error?
   1. Single strike through so the previous result is legible and initials
   2. Strike throughs so the previous result is illegible, initial and date
   3. Single strike through so the previous result is legible, initial and date
   4. B and C
      1. OHL-SHA-AN-02

**Antibody Screen and Antibody Identification:**

1. The patient has a previously identified antibody, but the screen is currently negative, does a result comment need to be entered into BBS?
   1. No
   2. Yes
      1. TXS-AD-01 ABIDHX-more time is needed for a compatible crossmatch

**Reference Testing:**

1. Ideally when sending a sample to an OhioHealth reference lab for antibody identification:
   1. Send the original tube to the reference lab
   2. Have a total of 3 tubes drawn from the patient
   3. Send 3 out of 4 tubes to the reference lab
   4. Send 1 out of 4 tubes to the reference lab
      1. TXS-PT-10, 13
2. When sending a C3DAT to an OhioHealth reference lab:
   1. Send all of the original tube to the reference lab
   2. Have 4 tubes redrawn and send 3 tubes to the reference lab
   3. Have 4 tubes redrawn and send all 4 tubes to the reference lab
   4. Remove an aliquot of at least 0.5 mL of packed RBCs to send to the reference lab
      1. TXS-PT-10

**Neonatal No Divide Sites:**

1. A baby is born in the ED and needs an emergent transfusion of RBCs. Mom’s type is A positive with a negative screen. This site doesn’t perform routine baby transfusions. Which of the following products would be the best choice?
   1. Any O Negative RBC
   2. O Negative RBC less than 7 days old
   3. O Negative RBC greater than 7 days old
   4. All of the above
      1. TXS-ON-0015