

Laboratory *News*

VOL. 43, NO. 1 - JANUARY 20, 2020

INSIDE THIS ISSUE

ABO/Rh CONFIRMATORY
TYPE1

CHANGES IN ETHYLENE
GLYCOL AND VOLATILES
TESTING2

SWEAT CHLORIDE TEST
ORDER CHANGE3

ABO/Rh CONFIRMATORY TYPE

Kathy Puca, MD, Transfusion Service, Marshfield Labs

Effective January 20, 2020, the Transfusion Service will implement a new process to more timely obtain a 2nd blood sample (if needed) for a confirmatory blood type prior to issuing ABO-specific RBCs for transfusion. This new process is to meet accreditation requirements and be aligned with national patient safety goals.

After January 20th, if an order for RBC transfusion is received and there is no previous ABO/Rh type on file in Marshfield Labs Blood Bank computer system, a 2nd ABO/Rh type will be ordered at no charge to confirm the patient's blood type for selection of blood for transfusion.

Below are some questions and answers to further explain this new process and provide information for you and your patients.

1. What is a confirmatory ABO/Rh type?
 - A 2nd blood type on the patient performed at a different day or time than the Type and Screen sample drawn for the intended transfusion.
 - This 2nd blood type may be satisfied by one of the following:
 - (1) Historical record of ABO/Rh type in Blood Bank computer system.
 - (2) Repeat ABO/Rh test performed on a sample already available in Lab and collected at a different time than the Type and Screen sample.
 - (3) Order placed by Transfusion Service staff for collection of sample for 2nd ABO/Rh type.
2. Will my patient be charged for this 2nd ABO/Rh type?
 - No. This 2nd blood type is a patient safety initiative and the patient will not be charged.



3. How will I know if my patient needs a 2nd sample collected?
 - Lab/Transfusion Service will determine if a 2nd sample is needed.
 - Lab/Transfusion Service will place the order for the sample collection.
 - Every effort will be made to collect this 2nd ABO/Rh type with next scheduled lab draw.
4. How long does it take to complete the testing for the 2nd ABO/Rh type?
 - Testing will be completed in about 20 minutes once sample is received in the Lab.
5. Will blood be available for my patient for surgery or any urgent transfusion if a 2nd sample cannot be collected right away?
 - Yes. Group 'O', crossmatched RBCs will be sent until the testing for the 2nd ABO/Rh type is completed.
6. What should I tell my patients if they ask why a 2nd sample is needed?
 - "Here at MCHS, to comply with guidelines for national patient safety goals, we re-confirm the blood type on all patients that may need a blood transfusion. If you have not been transfused at MCHS previously, a second specimen is collected to confirm your blood type."

QUESTIONS

- Further questions may be directed to Kathy Puca, MD or Clint Borek, Manager, Transfusion Service.
- Phone number: 800-222-5835. 📞

CHANGES IN ETHYLENE GLYCOL AND VOLATILES TESTING

Joyce L. Flanagan, PhD, DABCC, Clinical Chemist, Marshfield Labs

Effective February 1, 2020, Marshfield Labs will outsource ethylene glycol (**EG**) and toxic volatiles (**VOL**) testing to Mayo Clinic Laboratories in Rochester, MN.

BACKGROUND

EG or VOL (primarily methanol) intoxication is rare but life threatening. The decision to treat for possible intoxication cannot be delayed for toxicology testing results to become available. Fomepizole has a low side-effect profile and should be administered to patients when there is reasonable clinical and laboratory support for possible EG or VOL intoxication. High anion gap metabolic acidosis and a high osmolal gap are supportive lab data that are more rapidly available in-house to assist in this assessment. Repeat administration of fomepizole (if indicated) is generally done 12 hours after the first dose, when toxicology results are available.

In 2019, only 15 EG and 11 VOL tests were performed on patient samples; all were negative. Beyond financial considerations, the need for 24/7 availability puts additional burden on our limited staff trained to perform this high-complexity testing. After thoughtful discussion with our providers and other facilities regarding turn-around-time and impact on patient care, lab leadership has arranged to outsource these two tests to Mayo Clinic Laboratories.

All future EG and VOL requests will be handled as STAT. We request that prior to ordering the EG and/or VOL, in-house tests for anion gap, blood pH, and osmolal gap be ordered and evaluated to assess the likelihood of intoxication. Separate orders are needed for each test. Consultation with a clinical chemist or clinical pathologist is available if the situation remains unclear.

HOW TO ORDER

- **Ethylene Glycol** (Test Code: **ETGLSO**)

- Container/Tube: Red top
- Submission Container/Tube: Plastic vial
- Specimen Volume: 2 mL
- Collection Instructions:
 1. Centrifuge and remove serum from red blood cells within 2 hours of draw.
 2. Aliquot serum to submission container.

- **Volatile Screen** (Test Code: **VLSSO**)

Submit only one of the following specimens.

Preferred:

- Container/Tube: Serum gel
- Specimen Volume: Full tube
- Collection Instructions:
 1. Arm must be cleansed with water only.
 2. Avoid exposure of specimen to atmosphere.
 3. Do not aliquot.

Acceptable:

- Container/Tube: Red top
- Specimen Volume: Full tube
- Collection Instructions:
 1. Arm must be cleansed with water only.
 2. Avoid exposure of specimen to atmosphere.
 3. Centrifuge specimen within 2 hours of draw and send serum aliquot to laboratory refrigerated.

QUESTIONS

- Test information is available in [Marshfield Labs Test Reference Manual](#) or from Marshfield Labs Customer Service Department.
- Clinical and technical questions may be directed to Joyce Flanagan, PhD, Clinical Chemist.
- Phone number: 800-222-5835. 📞

SWEAT CHLORIDE TEST ORDER CHANGE

Joyce L. Flanagan, PhD, DABCC, Clinical Chemist, Marshfield Labs

Effective February 17, 2020, for outpatient sweat chloride test order, please call 1-7400 to schedule the appointment. Please also note, the check-in location for all future outpatient sweat chloride tests is Marshfield Medical Offices, Desk 1A, Pediatric Department. For in-patient sweat chloride test order, call 1-6245 to schedule.

QUESTIONS

- Test information is available in [Marshfield Labs Test Reference Manual](#) or from Marshfield Labs Customer Service Department.
- Clinical and technical questions may be directed to the Marshfield Labs Special Chemistry Dept.
- Phone number: 800-222-5835. 📞