Northern Plains Laboratory

Volume 14 Issue 68 401 North 9th Street, Bismarck ND 58501-4507 Sept 2018

Quality Corner- Phlebotomy for Nursing Home Patients

By Rhonda Burgard, Client Services Supervisor

Laboratory staff drawing blood from patients in the nursing home setting should take the following into consideration:

- The room in which the resident stays is their home. Be mindful of this and knock on the door and wait for approval to enter. Enter the room carefully and respectfully.
- Do no assume all elderly persons have a hearing disability. Determine your patient's level of hearing and adjust your voice accordingly. When conversing with the elderly patient make sure to face the patient and make eye contact. Some elderly patients with poor hearing may lip read as part of their communication strategy.
- Be pleasant and professional in your approach to the patient. Always call the patient by their name. Never as "Sweetheart", "Darling" or some other affectionate name. It may not be welcome. Listen to what the patient has to say without interrupting and give the patient a chance to ask questions.
- Elderly skin can be fragile. Use care when applying the tourniquet to not pinch the skin. At the end of the phlebotomy procedure place pressure on the venipuncture site for at least 5-15 seconds before bandaging to avoid bruising.
- Dementia can provide challenges for the patient when faced with the need to have their blood drawn. Even if the patient becomes agitated remain calm and professional. If needed seek help from nursing staff.
- If the patient is in a bed with handrails up to prevent falling make sure to return the handrails to the upper position at the end of the phlebotomy procedure. Because of the risk for a fall, do not volunteer to assist the patient to the rest room or other locations. Contact nursing staff for assistance.
- If you have a respiratory viral or any other type of transmissible infection, do not draw blood in the nursing home setting. Elderly patients may have compromised immune systems and can become ill if exposed. Illnesses in the elderly population can be life threatening.

Using care and respect when dealing with the elderly nursing home patient makes the phlebotomy process much more pleasant for the patient.

Reference: July 2018 Phlebotomy Today adapted from an original article by Garland Pendergraph PhD SM (ASCP) author of Phlebotomy and Patient Services Techniques

ARUP Specimen Requirement Changes for Metals Testing

By Rhonda Burgard, Client Services Supervisor

Effective November 12, 2018 ARUP Laboratories will no longer accept specimens for metals testing sent in non-certified metals-free tubes and will cancel orders sent in non-metal free tubes. The only exception to this policy will be capillary, **not venous**, lead testing sent in lavender microtainer tubes and adult lead testing sent in Royal Blue K_2EDTA tubes.

This policy is designed to reduce the risk of false-positive results and potential metals contamination, ensuring greater accuracy of patient results as well as compliance with ISO, CAP and other regulations.

Reference: AABB Technical Bulletin

Calling Critical Values

By Rhonda Burgard, Client Services Supervisor

The Code of Federal Regulations Title 42, Chapter IV, Subchapter G, Part 493 states “The laboratory must immediately alert the individual or entity requesting the test and, if applicable, the individual responsible for using the test results when any test result indicates an imminently life-threatening condition, or panic or alert values.” Each laboratory in conjunction with their laboratory director and medical staff should determine a list of critical values and critical results that pertain to its patient population. The Medical Laboratory Observer (MLO) journal annually publishes a listing of suggested critical values in the Clinical Laboratory.

Reference (CLR) at www.CLRL-online.com.

Test Changes at ARUP Laboratories

By Rhonda Burgard, Client Services Supervisor

ARUP now offers umbilical cord tissue testing for fentanyl as a quicker option to testing for fentanyl in meconium. (ARUP Test code 2006621) Additional add-on testing for umbilical cord tissue is also available for Ethyl Glucuronide (ARUP Test code 3000443) and Marijuana Metabolite (ARUP Test 3000256). Additional information can be found on the ARUP website at www.aruplab.com in ARUP Consult@ Newborn Drug Testing.

ARUP now offers real-time transcription-mediated amplification (TMA) testing for hepatitis C (HCV) RNA in serum and plasma. This test has ultrasensitive performance across a wide linear range and all major HCV genotypes. The quantitative range is 1.0-8.0 log IU/mL.

ARUP has revised the form for “Maternal Serum Testing” on the Genetics Patient History Forms page. If you submit this form with specimens please discard your current form and print out the new form at www.aruplab.com. NPL “Ask at order” questions have been changed to reflect the required information on the new form.

Flight Tracking

By Rhonda Burgard, Client Services Supervisor

For those clients that pick up Northern Plains Laboratory consultants at their local airports there is an application that will allow you to track our flight arrival time. Download Flight Aware tracking application at https://**flightaware.com** and enter the tail number “101ML”.

Changes to CAP and AABB Standards for Blood Banks

By Rhonda Burgard, Client Services Supervisor

The College of American Pathologists has recently updated some of their standards related to transfusion services. Some of the revised standards are:

- COM.30450 New reagent lots and shipments are checked against previous reagent lots or with suitable reference material before or concurrently with being placed in service- **This includes receipt of antibody RBC panels.**
- **New** TRM.40130 If the laboratory performs test procedures for which control materials are not commercially available, there are written procedures for an alternative mechanism to detect immediate errors and monitor test system performance over time.
- **New** TRM.42060 The transfusion service tracks the incidence of transfusion reactions and monitors the rate of transfusion reactions by each reaction type.
- TRM. 41150 There is a policy regarding the **addition of drugs**, or fluids other than 0.9% NaCl thru the same tubing simultaneously with blood or blood components.
- TRM.41350 Before issuance, a label or tag, including unit and patient identification and compatibility information must be securely attached to each blood or component unit and **remain attached until the completion of the transfusion**.
- TRM.32250 Competency records are kept for 5 years and temperature monitoring graphs and logs for 10 years.
- **New** TRM.40670 For laboratories that employ computer crossmatching serologic crossmatch techniques must be used when ABO typing discrepancies are present.

The American Association of Blood Banks has just released the 31st Edition of Standards for Blood Banks and Transfusion Services and the 19th Edition of the Technical Manual. Some of the revised standards are:

- Investigation and follow-up of equipment malfunctions and failures or adverse events shall include assessment of blood and blood components **since the device was known to be functioning per manufacturer's written specifications.**
- 3.5.2 Storage devices for blood, blood components, tissue derivative and **reagents** shall have alarms.
- 5.14.5 Pre-transfusion Testing for allogenic transfusion: There shall be two determinations of the recipients ABO group. **The first determination on a current sample** and the second one by testing a second current sample, comparison with previous records, retesting the same sample…
- 5.29.1 The patient medical record shall include … **the donor ABO/Rh type**….
- 5.1.8A **Maximum time without agitation has been lengthened from 24 to 30 hours** for platelet components.
- 6.2.7.1.2 Back-up data shall be stored in an off-site location **and be secured to prevent unauthorized access.**

- 7.1.1 Nonconforming blood, blood components, tissue and derivative shall be quarantined **and/or destroyed**.

Top Laboratory Deficiencies

By Rhonda Burgard, Client Services Supervisor

Currently seven independent accreditation organizations may certify clinical laboratories under CLIA. Some of the top deficiencies cited by the various organizations are:

- Testing personnel qualifications and competency assessment inadequate or not completed.
- Reagent receipt and storage temperatures not documented
- Use of expired reagents
- Completion and review of instrument function and maintenance records not completed
- Analytical measurement range verification not completed
- Documentation of acceptable specimen criteria not available
- Compliance with proficiency testing requirements not followed
- Quality control requirements not met.
- Quality assurance programs do not cover all of the required elements or are inadequate.
- Incomplete or inadequate standard operating procedure manuals,

Laboratories should be inspection ready at all times. Be familiar with your agencies inspection criteria and conduct periodic self-inspections. Address any documentation or quality issues identified prior to your laboratory inspection.

Reference: AACC Top Laboratory Deficiencies Across Accreditation Agencies, July 2018

RESPIRATORY PANEL BY PCR

By Ron Piatz, Research and Development

Northern Plains Laboratory (NPL) is pleased to announce the addition of the FilmArray® Respiratory Panel (Test code: RPPCR), to our in-house test menu. The FilmArray® Respiratory Panel is a multiplex nucleic acid test for the simultaneous qualitative detection and identification of multiple viral and bacterial nucleic acids in respiratory specimens obtained from individuals suspected of upper respiratory tract infections. This panel tests for the organisms listed below

Target Organism	**Target Organism**
Adenovirus	Rhinovirus/Enterovirus
Coronavirus	Respiratory Syncytial Virus
Human Metapneumovirus	*Bordetella parapertussis*
Influenza A (subtypes H1, 2009-H1 & H3)	*Bordetella pertussis*
Influenza B	*Chlamydophila pneumoniae*
Parainfluenza Virus	*Mycoplasma pneumoniae*

Specimen: Nasopharyngeal swab specimens are the recommended sample type. Nasopharyngeal swabs are collected following standard procedures and placed into Universal Transport Medium (3 mL UTM tubes). Label specimens with Sample ID and send to the laboratory. Samples are stable for 4 hours at room temperature, 3 days at refrigerator temperature (2-8°C) and 30 days at freezer temperature (< -15°C).

Note: Current Respiratory Viral Panel 9 by PCR and Respiratory Panel 20

by PCR will be discontinued. Test codes: VRP9 and VRPP.

For questions and/or additional testing information, please contact NPL at 701-530-5700 or 1-800-645-1003.

Test Code	CPT Codes	Test Name	Specimen	Reference Range
RPPCR	87632 87798 87798 87486 87581	Respiratory Panel by PCR	Nasopharyngeal Swab	Negative

Microbiology Test Ordering

By Robert Arndt, Microbiology Supervisor

In order for microbiology staff to efficiently process organisms that are submitted to Northern Plains Laboratory for identification (ID) or susceptibility (MIC), the client should add comments with any relevant information such as "gram negative bacilli" or "2 of 2 sets GPC in blood culture" or "possible strep pneumo".

Please remember that ID test codes should only be used when the client has isolated a single non-urine bacteria that needs to be identified. The UID test code is used for isolates that need to be identified from urine culture only. The MIC test code is for isolates that have been definitively identified by the client (please add a comment with the identification of the organism) and a susceptibility only is needed.
For all three of these codes (ID, UID and MIC), a separate order and isolated sample should be submitted for each order. For example, to submit a culture with two gram negative bacilli that require identification, isolate each colony type, swab each separate colony type with two different swab/culturettes and order an ID for each isolate.

Provide any relevant information as a comment, i.e. "possible Haemophilus" or "non-fermenting gram negative bacilli". The more information concerning the site/source or special characteristics of a microbiology specimen the better the ability of the microbiology staff to accurately identify any organisms present.

Changes to Recommendation for Syphilis Screening Among Pregnant Women

By Rhonda Burgard, Client Services Supervisor

Nationwide the reported cases of congenital syphilis have increased 86.9% from 2012 to 2016 with 628 reported cases, including 41 syphilitic stillbirths in 2016.

The CDC is recommending all pregnant women be screened for syphilis the first trimester of pregnancy and twice the third trimester, once at 28-32 weeks and again at delivery.

Reference: ND Department of Health Advisory, July 13, 2018