## **How Can I Reduce Turnaround Time Delays?**

Quality in clinical laboratories cannot be understood by merely focusing on the analytical aspects only; there is a need to put attention on pre-analytical and post-analytical aspects of laboratory testing to improve overall quality

of laboratory diagnosis. In the six month study, *Test requisition form-A check point in pre-analytical phase for laboratory errors*, published in Asian Pac. J. Health Sci., 2017; 4(2):175-182, authors P Toshniwal, S Toshniwal, J Jasani, and R M Shah evaluate the contribution of incompletely filled test requisition form in pre-analytical phase (which begins from the clinicians test order request including the examination, requisition, preparation of the patient, collection of the primary sample and transportation to and within the laboratory and ending when the analytical examination begins) and how this error could be minimized in the pre-analytical phase so to improve the quality of total testing process.



Incomplete or incorrect test requisition forms are the major sources of pre-analytical error that affects the quality of total testing process and influence patient safety and outcomes. Errors taking place in the pre-analytical phase almost account between 60 to 70% than the other phase's errors in the total testing process.

Details of incomplete and incorrect test requisition form observed at Nationwide Children's Laboratory Services:

Incomplete or wrong name of patient	Test checked/mentioned incorrectly
No date of birth of patient	Test mentioned in short forms
Gender not mentioned	Test not checked/mentioned
Incorrect or no ICD-10 code	Type of specimen not defined
No date/time of collection	Priority of test not marked
No specimen colletors name	Name of ordering physician not mentioned
<ul> <li>No or incorrectly filled billing information (a pediatric patient cannot be the guarantor)</li> </ul>	No physician's signature

Make it a habit to review the printed requisition to make sure the Patient, Insurance, and Specimen Information is correct before sending a specimen to the laboratory. Missing patient information often results in a phone call to your office staff requesting the missing information which could delay treatment.



## **INFORMATION TO KNOW**

## **Check Your Lab Supplies' Expiration Dates!**

As we begin a new year, we would like to take the opportunity to remind you to always check the expiration dates of your collection containers prior to collecting samples. Such containers include blood collection tubes, blood culture media, swabs, blood spot filter paper cards and all transport media (e.g., O&P, and Cary Blair media, viral M4 media, ThinPrep and Protocol 10% formalin media). It is good practice to check expiration dates of your collection supplies to avoid sample rejections, time taken to recollect the specimen, and delay of treatment by incorporating 'Supply Expiration Date' checks into your monthly checklist.

### **Cold Weather Specimen Storage Reminder**

Now that winter has arrived, it is important that samples placed in a lockbox outdoors prior to transport to the laboratory be maintained at the appropriate temperature. If refrigerated samples are stored in the lockbox, a non-frozen cold pack stored at room temperature should be placed in the lockbox to maintain the samples at the refrigerated temperature. The cold pack **should not be frozen**, since you do not want refrigerated whole blood samples to freeze.

Many laboratory tests performed at Nationwide Children's Laboratory Services require adequate refrigeration of specimens. By following this lockbox practice, you will help insure the integrity of the samples and ultimately obtain reliable laboratory results.

### **Reminder: ChildLink Access for Employees No Longer in Practice**

For security purposes, it is important to notify Laboratory Services at (800) 934-6575, as soon as an employee with ChildLink access (Laboratory Services online access center for tests) leaves your practice. Calling us as soon as possible ensures that previous employees are deactivated from ChildLink in a timely manner. Also, your Laboratory Services Account Representative would like to hear from you when new physicians or practitioners join your staff or if you have moved location(s). Having the most current information about your office demographics and practitioners, ensures prompt turnaround time of patient's lab reports.

## **Signature Requirements for Clinical Laboratory Test Requisitions**

As a reminder, test requisitions for clinical laboratory testing must include an authorized provider's signature. Stamped signatures, printed signatures, printed signatures with the RN or other staff's initials next to it are not considered authorized signatures. Test requisitions received without an authorized provider's signature will be treated as a verbal order and a request will be sent to the ordering provider requesting a signature. This requirement does not apply to the ChildLink electronic test orders when the authorized provider logs onto the ChildLink system and places the order.

Both CMS (Centers for Medicare and Medicaid) and CLIA '88 require validation that the clinical laboratory tests are ordered by an authorized individual. Test requisition requirements are referenced in CLIA 493.1241 Standard: test requisition and CMS CodeMap<sup>®</sup> Compliance Briefing: 7/1/2010. For further clarification regarding signature requirements for clinical test requisitions, please contact Client Services at (800) 934-6575.

## Looking for Printable Maps of Our Ohio Locations?

Laboratory Services offers three easy ways for your office to obtain maps with contact information and hours of operation for all of the Laboratory Service Centers located in Ohio.

- 1. Contact your Account Representative.
- 2. Call Client Services at (800) 934-6575.
- 3. Visit NationwideChildrens.org/Lab and click on "For Physicians" or "For Patients" > click on "Laboratory Service Centers" in the gray box on the right side of the web page > click on the "Laboratory Services Map" link that is located on the right side of the page and print.



## **INFORMATION TO KNOW**

## Woodmere Laboratory Services Center Closed

Nationwide Children's Hospital is committed to delivering the best outcomes in child health by developing a comprehensive, integrated healthcare delivery system. Laboratory Services has been key to delivering on the hospital's vision.

In February 2014, the Woodmere Laboratory Service Center was established in response to an untapped community and business need for pediatric laboratory service in the Woodmere area. Over the past year the service demand from children and families coming into the Woodmere site for lab work has remained low. Health care is an everchanging industry and we as health care providers are being challenged to look for ways to improve effectiveness and efficiency in quality, cost-effective care. We are always looking for the right service, right time, and delivery model. After considerable deliberation the decision has been made to change the laboratory service option. Therefore, the Woodmere Laboratory Service Center was closed November 17, 2017. Physician and patients will continue to be served by NCH Laboratory Services via courier services and the Parma Laboratory Service Center located at **1139 Rockside Road, Parma, Ohio.** 

Our appreciation and support to everyone as you continue to serve the needs of the children in the area and their primary care providers.

For questions regarding the Woodmere Laboratory Service Center closing and the Parma facility, please call Client Services at (800) 934-6575

## **TEST UPDATES**

## **Erythrocyte Sedimentation Rate**

On December 12, 2017, Laboratory Services converted both STAT (ESRS) and routine Wintrobe sedimentation rate (ESR) methods to a single new method and test code (SED). The new automated method will provide values similar to the current methods, however there will be new reference ranges (see table below).

Erythrocyte Sedimentation Rate Reference Ranges					
Reference Range previous to 12/12/2017		Reference Range as of 12/12/2017			
Age	Male	Female	Age	Male	Female
0yrs – 14yrs	0-13 mm/hr	0-13 mm/hr	0yrs – 14yrs	0-13 mm/hr	0-13 mm/hr
> 14 yrs	0-9 mm/hr	0-15 mm/hr	15 yrs - 50 yrs	0-15 mm/hr	0-20 mm/hr
			> 50 yrs	0-20 mm/hr	0-30 mm/hr

Erythrocyte Sedimentation Rate		
Test Code	SED	
Specimen Types & volume	3 mL purple top tube (EDTA) with 1 mL preferred volume of specimen	
Transport/Stability	Room temperature	
	Deliver to the lab as soon as possible.	
Performed / Turnaround Time	Performed 7 days a week with a typical turnaround time of 2 hours	
Comments	May be combined with CBC collection in a 3mL tube. Microtainers are not accpetable	

#### Parma Laboratory Service Center

Monday - Friday: 8:30 am - 5:30 p.m.

## **TEST UPDATES**

## Peanut Sub-component Specific IgE Testing

On December 5, 2017, NCH Immunoserology Laboratory began testing for individual peanut allergen subcomponents. The testing was previously referred to ARUP Laboratories.

In addition to the total peanut allergen level, the testing includes the following sub-components:

Sub-component specific IgE	Significance
rAra h1	Associated with systemic reactions
rAra h2	Associated with systemic reactions
rAra h3	Associated with systemic reactions
rAra h8	Associated with local reactions
rAra h9	Associated with both systemic and local reactions

• Sub-component testing requests require a specific order or may be added to a previous order for total peanut allergen up to 5 days after collection. The sub-components are not included in the food panel.

- Blood samples older than 5 days will require a new collection for the total peanut and components
- Total peanut allergen will be included with each set of components for interpretation

#### Ordering Information:

Peanut Sub-component Specific IgE		
Test Code	PCOP	
Specimen Types & volume	Red and Gold tops, EDTA (purple top), Lithium heparin (dark green top) - 3mL	
Transport/Stability	Whole blood – room temp 1hr, refrigerated 5 days	
	Serum/Plasma – room temp 8hr, refrigerated 5 days	
Performed	Monday – Friday	

#### **Vaginitis Pathogen Panel**

On December 12, 2017, NCH Microbiology Laboratory began rapid testing for agents of vaginitis/vaginosis using a direct nucleic acid probe assay, BD Affirm VPIII. This testing was previously referred to ARUP Laboratories. The Laboratory will perform testing using the same methodology that ARUP Laboratories used.

This panel includes testing for the following agents:

Pathogen	Condition
Gardnerella vaginalis	Marker for bacterial vaginosis
Candida species	Candida vaginitis
Trichomonas vaginalis	Trichomonas vaginitis

The testing is performed on vaginal swab samples only. The test can only be run on swabs collected with the BD Affirm VPIII Ambient Temperature Collection System.

#### Ordering Information:

Vaginitis Pathogen Panel		
Test Code	VAGPP	
Specimen Types & volume	Vaginal Swab collected with BD Affirm VPIII Ambient Temperature Collection System kit	Contact Client Services to obtain collection kits
Transport/Stability	Room temperature - 72 hrs Refrigerated - 72 hrs	Please cap the tube firmly to prevent leakage during transport
Performed / Turnaround Time	STAT: 24/7 Routine: Testing once daily Monday – Friday	

## **TEST UPDATES**

#### **BRAF V600 Mutation Analysis**

On November 6th, 2017, Nationwide Children's Hospital Institute for Genomic Medicine (IGM) Clinical Lab launched a new test called **BRAF V600 Mutation Analysis**.

This test is performed on tumor specimens and detects activating mutations at codon 600 of the BRAF gene. This is a targeted sequence analysis of BRAF exon 15 performed by Sanger sequencing. Results of this test can help assess responsiveness to BRAF inhibitors, resistance to anti-EGFR therapy, and/or assess prognosis of certain cancers.

#### Ordering Information:

BRAF V600 Mutation Analysis		
Test Code	BRAFV600	
Specimen Types & volume	<ul> <li>This test requires a tumor sample containing a minimum of 40% tumor content. Internal pathology review will be performed to determine the tumor content in specimen.</li> <li>Accepted specimen types:</li> <li>Frozen tumor tissue</li> <li>Fresh tumor tissue</li> <li>OCT-embedded tumor tissue</li> <li>FFPE tumor tissue block</li> <li>FFPE tumor scrolls with H&amp;E slide</li> </ul>	
Transport/Stability	<ul> <li>Frozen tumor tissue – transport frozen (buried in dry ice) via overnight courier (24 hour stability)</li> <li>Fresh tumor tissue - transport in transport media via overnight courier (24 hour stability)</li> <li>OCT-embedded tumor tissue – transport frozen (buried in dry ice) via overnight courier (24 hour stability)</li> <li>FFPE tumor tissue block or scrolls – transport at ambient temperature and avoid heat (6 months stability)</li> </ul>	
Performed / Turnaround Time	10 days	
Comments	Common pediatric tumor types submitted for this test include brain tumor (gliomas), including gangliogliomas, pleiomorphic xanthroastrocytomas, and diffusely infiltrative astrocytomas.	

# For more information about these test updates, please contact Nationwide Children's Laboratory Client Services at (614) 722-5477 or (800) 934-6575.





Nationwide Children's Hospital 700 Children's Drive Columbus, Ohio 43205-2664

## How can Nationwide Children's Laboratory Services help your practice?

- · Pediatric pathologist consults on lab results
- Wide acceptance of insurance plans
- Pediatric reference ranges
- Services to enhance the laboratory process in your practice
- Interface compatibility with provider EMR systems



If you would like to become a client or learn more information about Nationwide Children's Laboratory Services, contact us at (800) 934-6575 or visit our website at <u>NationwideChildrens.org/Lab</u>.

Would you like to receive the Nationwide Children's Laboratory Services Newsletter electronically? Please e-mail us at <u>LaboratoryServices@NationwideChildrens.org</u> and let us know!