

Schedule an Education Course in Your Office and Receive a CE Credit!

Pediatric patients require a unique medical approach, as significant differences exist in this patient population in disease frequencies, specimen collection, test performance, and test interpretation. The provider education courses are offered by experts from their technical areas to provide your staff with information and educational topics to provide best outcomes for your patients. The Nationwide Children's Hospital is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The Nationwide Children's Hospital designates this live activity for a maximum of *1.0 AMA PRA Category 1 Credit(s)™*.

Courses Offered:

Update on Testing For Sexually Transmitted Infections (STIs) in Adolescents and Children

- Understand the epidemiology of select STIs in adolescent patients
- Identify the microbiology and testing methodologies for STIs
- Apply current consensus recommendations concerning STI testing
- Identify some of the unique issues associated with STI testing in adolescent and pediatric populations

Vitamin D: Why All the Hype?

- Physiological function of Vitamin D
- Differentiate the forms and functions of Vitamin D
- Critically evaluate claims of Vitamin D efficacy for extra-skeletal benefits

Chromosome Analysis & Microarray Analysis

- Explain the methodology difference between chromosome analysis versus microarray analysis
- Discuss the different types of chromosomal abnormalities detected/missed by each of these two tests
- Review appropriate patient indications for each of these two tests

Lead and Lipid Testing

- Learn the basics of physiological lipids
- Review guidelines for screening children for lipid disorders
- Describe how to follow up on abnormal lipid results

Drug Testing in the Pediatric Patient

- Know how and which tests to order to detect drugs in patients
- Understand the basics of how drugs are measured in the blood and urine
- Be able to accurately interpret drug screen results

Diagnosis of Respiratory and Gastrointestinal Virus Infections: FilmArray® Panels

- Review impact and epidemiology of viral respiratory and gastrointestinal agents
- Identify the diagnostic tools in use and factors affecting performance
- Understanding the PCR technology and specimen processing behind the array
- Identifying the multiple targets detected by the array
- Evaluating the meaning of positive targets provided by this testing methodology in the pediatric patient population

We are able to present other educational topics as requested, as well as Pathologist to Pathologist presentations and consults. If you are interested in any of the above courses or would like an other topic presented, please contact Stacy Burrier at Stacy.Burrier@NationwideChildrens.org or register online at NationwideChildrens.org/Lab. Click on "For Physicians" and select "Physician Education Opportunities" from the menu on the left.



INFORMATION TO KNOW

Itchy Eyes, Runny Nose, Hives?

With the arrival of spring comes environmental allergies. Nationwide Children's Laboratory Services offers a tool that will aid in your management and diagnosis of Allergic Disorders. The ImmunoCAP[®] Specific IgE blood test is an in vitro quantitative test that measures allergen-specific IgE in human serum or plasma. It's diagnostic use is intended to aid in the clinical diagnosis of IgE mediated Allergic Disorders in conjunction with other clinical findings. Along with over 82 individually orderable allergens, Laboratory Services offers five allergen profiles as well as our new peanut sub-component specific IgE testing.

- Childhood Allergy Profile
- Respiratory Allergy Profile
- Food Allergy Profile
- Region 5 Allergy Profile - Ohio Valley (IN, OH, TN, WV, KY)
- Seafood Allergy Profile
- Peanut Sub-component Specific IgE



Summer is Just Around the Corner

With warm weather approaching, stool parasites and microbes are often prevalent with spoiled food, contaminated swimming pools, lakes and ponds. Laboratory Services would like to take the opportunity to remind you to stock up on your O&P and Cary-Blair media that we provide.



Laboratory Services offers multiplex molecular testing for gastrointestinal (GI) pathogens. The spectrum of pathogens that cause GI infections is quite broad and typically requires an assortment of classical detection methods (fecal examination, bacterial culture, and PCR testing) to identify the causative agent. Many of these classical methods suffer from variable specificity and sensitivity, and are often poorly utilized due to a lack of understanding of each method's intended use. Molecular testing is more sensitive and faster than conventional methods for detection of gastrointestinal pathogens.

The Gastrointestinal Infection Array tests for common gastrointestinal pathogens including 11 bacteria, 5 viruses, and 4 protozoa that cause infectious diarrhea. The GI Array is designed as a screening test for gastrointestinal infections where a rapid comprehensive answer is desired. It is meant to be ordered in place of conventional testing such as routine stool culture, ova and parasite examinations, and antigen testing.

For optimal GI Array testing, stool specimens should be collected in a Cary-Blair collection container with media, and transported to a Nationwide Children's Laboratory Service Center within 24 hours at room temperature or 72 hours refrigerated. Testing is performed 24/7 with a turn-around time estimated at 8 hours of receipt.

INFORMATION TO KNOW

Why Send Your Patients to a Nationwide Children's Laboratory Service Center?

In your patient's neighborhood

Our 17 convenient locations, staffed by more than 100 pediatric experts, allows testing, treatment and care for children and families to be right where your patient's need it most – close to home.

Convenience

We know your patient's schedules can be busy. We make it easier by providing extended weekday hours and weekend times at our various locations throughout the region for anyone who needs a blood draw or simply drop off a specimen for testing. Our laboratory services are all within a 15 minute drive from 85 percent of the pediatric population in central Ohio.

Trained Pediatric Phlebotomists

Like pediatric patients who have challenging blood draws or who are very anxious, adult patients can be challenging and anxious too. At our facilities, you can expect exceptionally trained pediatric phlebotomists and lab technicians that will always provide special care and attention to your patient, young or old.

Micro-Sampling

Because we use micro-sampling instrumentation to allow for more accurate results on small samples, many of our lab tests can be drawn by capillary fingerstick. i.e. lipid profile, vitamin D-25 hydroxy, thyroid profile, metabolic panels, and much more.

Time sensitive results

Every test is time sensitive, so we ensure testing always begins as soon as possible after the sample is received. Our tests are processed around-the-clock and our staff can be reached 24 hours a day.

Full range testing

A comprehensive range of more than 1,000 pediatric laboratory test are available to you and your patients, including pediatric specialty testing such as molecular testing for cancer, infectious diseases and neuromuscular disorders.

Pediatric reference ranges

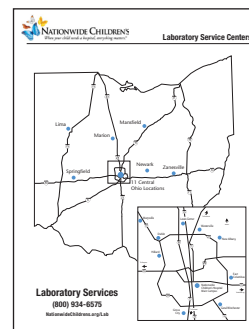
It takes special expertise to understand pediatric reference ranges. It takes even greater expertise to develop them. Our customized pediatric reference ranges ensure personalized diagnosis and treatment in every test we perform.

Visit NationwideChildrens.org/Lab to find a convenient location and access our complete testing menu.

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

National Recognition to Medical Laboratory Professionals and Physicians

National Medical Laboratory Professionals Week, April 18–24, is a time of recognition for medical laboratory professionals and board-certified pathologists who play a vital role in every aspect of health care. Nationwide Children’s Laboratory Services’ commitment to delivering accurate quality results for a healthier tomorrow is reflected in this year’s theme: ‘Laboratory Professionals Get Results’.



National Doctors Day, March 30 - Laboratory Services would like to extend our gratitude and appreciation to all physicians in the community by thanking them for their wealth of scientific knowledge, sympathy and compassion in ministering to the sick and in alleviating human suffering. *Thank you physicians!*

TEST UPDATES

IDUA Gene Sequencing

Nationwide Children’s Hospital Institute for Genomic Medicine (IGM) Clinical Laboratory is currently offering a new test called ***IDUA* Gene Sequencing (Test Code: HSIDUA)**. This test was previously sent out to Greenwood Genetic Center Molecular Diagnostics Lab but now will be performed by the NCH IGM Clinical Laboratory.

This test is a full gene sequence analysis of the *IDUA* gene. The presence of a pathogenic variant in both alleles of the *IDUA* gene causes an autosomal recessive genetic disorder called Mucopolysaccharidosis Type I (MPS I), also known as Hurler syndrome, Hurler-Scheie syndrome, and Scheie syndrome. This condition has been recently added to the Ohio Newborn Screening. *IDUA* sequencing will be used as a diagnostic confirmation test for newborns with a positive MPS1 screen to be interpreted in conjunction with alpha-L-iduronidase enzyme activity testing.

<i>IDUA</i> Gene Sequencing	
Test Code	HSIDUA
Specimen Type & Volume	Peripheral blood (2-4mL in EDTA tube, 1mL minimum)
Specimen Stability/Transport	Transport at room temperature within 24 hours or refrigerated within 72 hours after collection
Turnaround Time	14 days
Comments	<ul style="list-style-type: none">• Although completion of informed consent form is recommended, submission of consent form is not required for this testing.• This test is orderable in the NCH EPIC system. To search for this test, enter “Genetics” in Meds & Orders search field, click on the “Facility List (F6)” tab, select “CYTOGENETICS/MOLECULAR GENETICS ORDERS” (do not choose the STAT order set), and click “Accept.” This will display list of genetic tests including <i>IDUA</i> GENE SEQUENCING. Leave the check box checked for “GENETICS SPECIMEN LABEL.”

TEST UPDATES

Testosterone Reference Range Change

On March 14th, 2018, Testosterone by Liquid Chromatography–Mass Spectrometry (LC-MS) offered in the Congenital Adrenal Hyperplasia Profile 6 (CAH6) normal reference range was updated. A recent study has provided a harmonized normal reference range for adult males >18 years old.

To ensure consistency with clinical standards Nationwide Children's Laboratory Services updated their normal reference range of 348 – 1197 ng/dL to 264 – 916 ng/dL.

Testosterone by Liquid Chromatography–Mass Spectrometry (LC-MS)							
Current				New			
Gender	Age	Range	Unit	Gender	Age	Range	Unit
Male	>18 Yrs.	348 – 1197	ng/dL	Male	>18 Yrs.	264 – 916	ng/dL

Minimal Residual Disease Testing for B Lymphoblastic Leukemia/Lymphoma

On January 23, 2018, COG-approved **Minimal Residual Disease (MRD)** testing for B Lymphoblastic Leukemia/Lymphoma (B-ALL) went live at Nationwide Children's Hospital with orderable test codes in EPIC. This sensitive flow cytometric assay can reliably identify as low as one leukemic cell out of 10,000 benign cells (0.01%).

Evaluation for MRD in B-ALL patients is typically performed on peripheral blood samples at Day 8, and then repeated on a bone marrow aspirate sample on Day 29. Importantly, this assay can also be performed at essentially all other therapeutic time points or whenever B-ALL relapse is suspected.

BALL MRD, Bone Marrow Testing	
Test Code	MRDBM
Specimen Type & Volume	Purple tube (EDTA) 3 mL minimum volume
Included Tests	CD20, CD10, CD38, CD19, CD58, CD45, CD9, CD13, CD33, CD34, CD3, CD71, CD22
Specimen Stability / Transport	Room temp 1hour
Turnaround Time	Monday through Friday dayshift, typical turnaround is 2 days
Comments	If specimen received after 4pm Friday and between 10am Sunday, please call the Special Heme tech on-call

BALL MRD, Peripheral Blood Day 8	
Test Code	BALMRD
Specimen Type & Volume	Purple tube (EDTA) 4mL minimum volume
Included Tests	CD20, CD34, CD19, CD10, CD45
Specimen Stability / Transport	Room temp 1hour
Turnaround Time	Monday through Friday dayshift, typical turnaround time is 2 days
Comments	If specimen received after 4pm Friday and between 10 a.m. Sunday, please call the Special Heme technician on-call

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**

When your child needs a hospital, everything matters.™

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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 NationwideChildrens.org/Lab.

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