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Laboratory Services

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**NATIONWIDE
CHILDREN'S®**

When your child needs a hospital, everything matters.

Zanesville Laboratory Service Center Moves!



The pediatric expertise you count on from Nationwide Children's Hospital is also in Zanesville – bringing specialized services to the families of

Muskingum County and beyond. Your first call should always be to your pediatrician or family doctor who knows your child best.

Our Services

Adolescent & Adult Congenital Heart Disease Program

- By Appointment

Cardiology Clinic

- By Appointment

Electrocardiogram Testing (EKG)

- By Appointment

Genetics

- By Appointment

Hematology/Oncology

- By Appointment

Laboratory Services

- See website for hours

Urology

- By Appointment

This is not an urgent care or emergency department. For emergencies, call 911 or go to the nearest emergency department.

Zanesville Close To Home Center

740 Adair Avenue

Zanesville, OH 43701

(740) 588-0237, FAX (740) 588-0240

Pregnancy Loss: Test Options Available to Help Your Patients Find Out the Cause

The body is made up of billions of cells. Inside each cell are chromosomes. Chromosomes are structures that contain thousands of genes that tell the body how to grow and work. Normally each cell has 46

chromosomes matched into 23 pairs based on size. To form a pair, one chromosome comes from the mother and the other comes from the father. Having an extra or missing chromosome piece can lead to problems including birth defects and pregnancy loss.

More than half of first trimester pregnancy losses are due to the fetus (unborn baby) having an extra or missing chromosome piece. These changes usually happen in the fetus by chance but sometimes they can be inherited from a parent.

We offer two genetic tests to look for chromosome changes: Chromosome Analysis & Microarray Analysis.

Chromosome Analysis:

For this test, the lab will use cells from the pregnancy loss—the placenta, umbilical cord or fetus. Sometimes the mother's amniotic fluid is used. The lab will first grow out the cells. Once enough cells grow the lab will look under the chromosomes under the microscope.

The lab checks each chromosome for extra or missing pieces and for an abnormal structure.

If the cells do not grow, the doctor may order a microarray analysis test.

Microarray Analysis:

Microarray analysis also uses cells from the pregnancy loss, but there is not a need to grow cells for this test.

Microarray analysis can find very small missing or extra chromosome pieces that cannot be seen under a microscope. This is done by comparing the sample from the pregnancy loss to a normal control sample.

Usually, each chromosome pair in a pair is different since one copy comes from each parent. If a large part of one chromosome pair is the same, it could mean that both chromosome copies came from the same parent. When many parts of the chromosomes are the same, it could mean that parents are related by blood in some way.

Unlike chromosome analysis, microarray analysis does not look at the chromosome structure. Sometimes an extra or missing piece(s) of chromosome is found, but it is not always clear if this finding caused the pregnancy loss.

When more tests are needed:

Most of the time, chromosome changes happen by chance. If changes are found that are not felt to be inherited, no further work-up for pregnancy loss may be needed. If the change could be inherited, the doctor may order genetic tests on one or both parents to find out if it was passed down from a parent or is something new in the fetus. This will help to know the risk for chromosome change in future pregnancy.

Spotlight on Client Services:



Marketa started working at Nationwide Children's Hospital in March of 2003. Marketa first started working in Central Processing & Accessioning before she switched over to work with Client Services in January of this year. She has a Bachelor's degree in Natural Science and is a Medical Technologist, ASCP. Outside of

work, Marketa enjoys spending time with her family and watching movies with her spouse, son, grandson and her two grand-dogs! Marketa's advice for clients is: "Please remember to label specimens and complete requisitions."

Cold Weather Specimen Storage

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.

Community Respiratory and Gastrointestinal Illnesses



Nationwide Children's Laboratory Services provides weekly reports for respiratory and gastrointestinal illnesses,

giving insight into disease trends within the community. You can view these updated weekly reports on our website by visiting: <https://www.nationwidechildrens.org/specialties/laboratory-services/for-providers/pathogen-surveillance-reports-antibiograms>

eSwab Replacement of Traditional Bacterial Culture Swabs

The Microbiology Laboratory has converted to the eSwab® collection/transport for the majority of bacterial culture collections. Providers can use the eSwab® as you would the traditional bacterial culturette swab except for cultures suspected or screening for *Neisseria gonorrhoeae* (GC), which includes GC screens from eye, genital and throat sources.



The traditional dual swab (Copan) will continue to be used for:

- Routine genital culture or GC screen
- Eye/Throat screen for GC
- Pre-Op Staph aureus MRSA screen (SANPCR)
- Molecular Group A Strep

Moving forward, offices can expect to receive the eSwab® when ordering supplies from NCH. Copan swabs will only be supplied in limited quantities upon request.

Filter Paper Lead Training

Did you know that our team will provide refresh training for collecting Filter Paper Leads? If you have new staff or if it's been a while since you've done collections, our Lab Representatives are available to provide collection tips and training! See contact information at the end of this newsletter! If you do not know who your Laboratory Services Representative is, contact Laboratory Services and they can help you.





When your child needs a hospital, everything matters.

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Columbus, OH 43205

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

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!

Lab Account Representatives are available via email to assist with any questions or concerns.

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