



CARDIOPULMONARY SERVICES

Cardiopulmonary Staff are credentialed by the National Board for Respiratory Care and the Tennessee Society for Respiratory Care with ACLS, NRP, and BLS certification.

Echocardiogram is accredited by the Intersocietal Accreditation Commission (IAC) in:

- Adult Transthoracic Echocardiography
- Adult Stress Echocardiography
- Adult Transesophageal Echocardiography (TEE)

Services include but are not limited to:

Cardiac Diagnostics

- Electrocardiogram (EKG)
- Echocardiogram (Echo)
- Stress Echocardiogram (Stress Echo)
- Transesophageal Echocardiogram (TEE)
- Cardioversion

Pulmonary Diagnostics

- Pulmonary function screening
- Pulmonary function with bronchodilator
- DLCO
- Lung Volumes
- Methacholine Challenge
- Arterial blood gas puncture and analysis



Electrocardiogram (EKG)

An electrocardiogram (EKG) test is a simple, painless procedure that measures electrical signals in your heart. Each time your heart beats, an electrical signal travels through the heart. An EKG can show if your heart is beating at a normal rate and strength.



Exam Information:

- Please wear comfortable clothing
- Arrive 30 minutes prior to your scheduled appointment to register

Electrocardiogram (EKG) (cont)

Upon arrival, you will be registered and escorted to an exam room where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam only takes about 15 minutes.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A technologist will explain the procedure prior to the exam and help answer questions. If requested by your physician, a CD will be provided prior to your discharge. If you have scheduling concerns, please call (865) 374-4000.

***Results should be available within 48 hours, either through your personal patient portal or your ordering provide**

Echocardiogram (Echo)

An echocardiogram uses sound waves to produce images of your heart. This common test allows your doctor to see your heart beating and pumping blood. Your doctor can use the images from an echocardiogram to identify heart disease.



Exam Information:

- Please wear comfortable clothing
- Patient will be placed in a gown that opens in the front
- Arrive 30 minutes prior to your scheduled appointment to register
- Bring a current written list of medications

Echocardiogram (Echo) (cont)

Upon arrival, you will be registered and escorted to an exam room where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam can take up to 60 minutes to complete. Please call (865) 446-8100 if you have questions regarding your exam preparation. A technologist will explain the procedure prior to the exam and help answer questions. If requested by your physician, a CD can be requested and picked up from Medical Records Monday – Friday 8:00am - 4:30pm. If you have scheduling concerns, please call (865) 374-4000.

Stress Echocardiogram (Stress Echo)

A stress echocardiogram is a test done to assess how well the heart works under stress. The “stress” can be triggered by either exercise on a treadmill or a medicine called dobutamine. A dobutamine stress echocardiogram (DSE) may be used if you are unable to exercise.



Exam Information:

- Please wear comfortable clothing and good walking shoes
- Patient will be placed in a gown that opens in the front
- Arrive 30 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- The exam requires you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Stress Echocardiogram (Stress Echo) (cont)

Upon arrival, you will be registered and escorted to an exam room where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam can take up to 60 minutes to complete. Please call (865) 446-8100 if you have questions regarding your exam preparation. A technologist will explain the procedure prior to the exam and help answer questions. If requested by your physician, a CD can be requested and pickup from Medical Records Monday – Friday 8:00am - 4:30pm. If you have scheduling concerns, please call (865) 374-4000.



Transesophageal Echocardiogram (TEE)

A transesophageal echocardiogram (TEE) is a special type of echocardiogram. It is usually done when your doctor wants to get a more detailed look at your heart. It is done with a scope placed down your esophagus under sedation. The scope uses high-frequency sound waves (ultrasound) to examine the structures of the heart.

Exam Information:

- Please wear comfortable clothing
- Arrive 60 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- The exam requires you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Transesophageal Echocardiogram (TEE) (cont)

Upon arrival, you will be registered and escorted to the Cardiopulmonary Department where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam itself only takes about 15 minutes, but setup and recovery makes the whole process last about 2 hours.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Technologist will explain the procedure prior to the exam and help answer questions. If requested by your physician, a CD can be requested and picked up from Medical Records Monday – Friday 8:00am -4:30pm. If you have scheduling concerns, please call (865) 374-4000.

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Cardioversion

Cardioversion is a procedure used to return an abnormal heartbeat to a normal rhythm. This procedure is used when the heart is beating very fast or irregular. This is called an arrhythmia. Arrhythmias can cause problems such as fainting, stroke, heart attack, and even sudden cardiac death.

Exam Information:

- Please wear comfortable clothing
- Arrive 60 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- The exam requires you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Cardioversion (cont)

Upon arrival, you will be registered and escorted to the Cardiopulmonary Department where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam itself only takes about 15 minutes, but setup and recovery makes the whole process last about 2 hours.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Technologist will explain the procedure prior to the exam and help answer questions. If requested by your physician, a CD can be requested and picked up from Medical Records Monday – Friday 8:00am -4:30pm. If you have scheduling concerns, please call (865) 374-4000.

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Pulmonary Function Screening

Pulmonary function tests (PFTs) are noninvasive tests that show how well the lungs are working. The tests measure lung volume, capacity, rates of flow, and gas exchange. This information can help your healthcare provider diagnose and decide the treatment of certain lung disorders.

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Do not smoke for at least six hours prior to testing
- Arrive 30 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- If you are using a short-acting inhaler that is used only as needed, do not use for six to eight hours prior to testing, if possible
- The exam requires you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Pulmonary Function Screening (PFT) (cont)

Upon arrival, you will be registered and escorted to the Cardiopulmonary Department where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam takes about 30-60 minutes.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Therapist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

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Pulmonary Function test with Bronchodilator

A bronchodilator challenge may be done as part of a spirometry test or full PFTs to identify airway diseases or to assess the effectiveness of current therapy. A baseline test is completed and then a bronchodilator, usually via a nebulizer, is administered followed by repeating the spirometry.

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Do not smoke for at least six hours prior to testing
- Arrive 30 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- If you are using a short-acting inhaler that is used only as needed, do not use for six to eight hours prior to testing, if possible
- The exam require you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Pulmonary Function test with Bronchodilator (cont)

Upon arrival, you will be registered and escorted to the Cardiopulmonary Department where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The portion of the exam takes about 10 minutes of the 30-60 minute PFT exam.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Therapist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

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Diffusing capacity of Lungs for Carbon Monoxide (DLCO)

Spirometry is the most common and widely used lung function test, followed by diffusing capacity of the lungs for carbon monoxide (DLCO). DLCO is a measurement to assess the lungs' ability to transfer gas from inspired air to the bloodstream.

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Do not smoke for at least six hours prior to testing
- Arrive 30 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- If you are using a short-acting inhaler that is used only as needed, do not use for six to eight hours prior to testing, if possible
- The exam requires you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Diffusing capacity of Lungs for Carbon Monoxide (DLCO)

(cont)

Upon arrival, you will be registered and escorted to the Cardiopulmonary Department where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The portion of the exam takes about 10 minutes of the 30-60 minute PFT exam.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Therapist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

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Lung Volumes

Lung Volume testing is another commonly performed lung function test. It is more precise than spirometry and measures the volume of air in the lungs, including the air that remains at the end of a normal breath. In addition, a diffusing capacity test measures how easily oxygen enters the bloodstream.

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Do not smoke for at least six hours prior to testing
- Arrive 30 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- If you are using a short-acting inhaler that is used only as needed, do not use for six to eight hours prior to testing, if possible
- The exam requires you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Lung Volumes (cont)

Upon arrival, you will be registered and escorted to the Cardiopulmonary Department where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The portion of the exam takes about 10 minutes of the 30-60 minute PFT exam.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Therapist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

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Methacholine Challenge

Methacholine challenge test (also known as bronchoprovocation test) is performed to evaluate how "reactive" or "responsive" your lungs are.

It can help your doctor evaluate symptoms suggestive of asthma, such as cough, chest tightness and shortness of breath, and help diagnose whether or not you have asthma. During the test, you will be asked to inhale doses of methacholine, a drug that can cause narrowing of the airways. A breathing test will be repeated after each dose of methacholine to measure the degree of narrowing or constriction of the airways.

The test starts with a very small dose of methacholine and, depending on your response, the doses will be increased until either you experience 20 percent drop in breathing ability, or you reach a maximum dose with no change in your lung function.

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Do not smoke for at least six hours prior to testing
- Arrive 30 minutes prior to your scheduled appointment to register
- Bring a current written list of medications
- If you are using a short-acting inhaler that is used only as needed, do not use for six to eight hours prior to testing, if possible
- The exam require you to be NPO (without food/drink) from midnight before the exam, till after the exam is completed

Methacholine Challenge (cont)

Upon arrival, you will be registered and escorted to the Cardiopulmonary Department where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam takes about 60-90 minutes.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Therapist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

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Arterial Blood Gas (ABG)

An arterial blood gas (ABG) test measures oxygen and carbon dioxide levels in your blood. It also measures your body's acid-base (pH) level, which is usually in balance when you're healthy. You may get this test if you have a serious injury or illness. The test gives your doctor clues about how well your lungs, heart, and kidneys are working.

ABG checks for severe breathing and lung problems such as asthma, cystic fibrosis, chronic obstructive pulmonary disease (COPD), obstructive sleep apnea, or whether you need extra oxygen or other help with breathing.

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Arrive 30 minutes prior to your scheduled appointment to register

Arterial Blood Gas (ABG) (cont)

Upon arrival, you will be registered and escorted to the Outpatient Lab where you complete the procedure. The procedure will take about 10 minutes.

Please call (865) 446-8100 if you have questions regarding your exam preparation. A Therapist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

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Heart Cath

LeConte Medical Center offers full-service diagnostic heart catheterization services through our fully-digital Toshiba Cath Lab.

Cardiac catheterization is a medical procedure used to diagnose and treat some heart conditions. A long, thin, flexible tube called a catheter is put into a blood vessel. Through the catheter, your doctor can do diagnostic tests and treatments on your heart.

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Arrive 60 minutes prior to your scheduled appointment to register

Heart Cath (cont)

Upon arrival, you will be registered and escorted to the Heart Cath Lab area where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam itself only takes about 30-45 minutes, but setup and recovery makes the whole process last about 4 hours.

Please call (865) 446-7909 if you have questions regarding your exam preparation. A Nurse will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

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Interventional Radiology

Interventional Radiology is a subspecialty of Radiology in which minimally invasive procedures are performed using image guidance. The concept behind IR is to diagnose or treat pathology with the most minimally invasive technique possible. IR procedures can reduce infection rates, recovery times, and shorten hospital stays. As a result, many IR procedures are performed with conscious sedation.

Common IR Procedures:

- Bone Marrow Biopsies
- Tunneled Pleural Catheter Placement
- Pleurx Catheters
- Joint Injections
- Paracentesis
- Thoracentesis
- Thyroid Biopsies

Exam Information:

- Please wear comfortable clothing
- Take your daily medications prior to testing unless told otherwise
- Arrive 60 minutes prior to your scheduled appointment to register

Interventional Radiology (cont)

Upon arrival, you will be registered and escorted to the Interventional Radiology Lab where you will be asked about your medical history. If lab work is needed, it will be completed prior to the exam. The exam itself only takes about 30-45 minutes, but setup and recovery makes the whole process last about 2 to 4 hours.

Please call (865) 446-7909 if you have questions regarding your exam preparation. A Nurse or Technologist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (865) 374-4000.

***Results should be available within 48 hours, either through your personal patient portal or your ordering provider**