



Cardiovascular & Thoracic Associates



## DASH DIET

Research sponsored by the U.S. National Institutes of Health developed the Dietary Approaches to Stop Hypertension diet in order to help people lower their blood pressure without medication.

In addition to this benefit, clinical trials have shown that those using the DASH plan tended to reduce LDL (bad) cholesterol level and lose weight.

DASH has shown promise in preventing and controlling diabetes, and its recommendations are similar to those of the American Diabetes Association.

U.S. News and World Report magazine consistently ranks DASH as the No. 1 best overall diet, noting that the fact that it does not eliminate entire food groups makes it easier to follow. Additionally, lots of DASH tips and recipes are available online.

### WHAT IS THE DASH DIET?

The plan emphasizes food that is low in saturated and trans fats; rich in potassium, calcium, magnesium, fiber and protein; and lower in sodium, such as:

- Fruits.
- Vegetables.
- Whole grains.
- Low-fat dairy.
- Fish.
- Poultry.
- Beans.

- Nuts.
- Seeds.
- Vegetable oils.

The diet recommends eliminating or reducing:

- Fatty meats.
- Full-fat dairy products.
- Tropical oils such as coconut, palm kernel, and palm oils.
- Sugar-sweetened beverages.
- Sweets.
- Baked goods (cookies, cakes, pies, and crackers).
- Ready-to-use frostings.
- Snack food (such as potato chips and microwave popcorn).
- Fried food typically found in fast food restaurants (such as French fries, fried chicken and doughnuts).
- Refrigerated dough products (such as biscuits, cinnamon rolls and frozen pizza).
- Vegetable shortening.
- Whole grains.
- Stick margarine.
- Coffee creamer.

## TIPS FOR FOLLOWING THE DASH DIET

For a 2,000-calorie-a-day diet, the DASH diet calls for the following each day:

- 6-8 servings of grains.
- 6 or fewer servings of meat, poultry or fish.
- 4-5 servings of vegetables.
- 4-5 servings of fruit.
- 2-3 servings of low-fat or fat-free dairy products.
- 2-3 servings of fats or oils.
- A total of 2,300 milligrams of sodium (1,500 milligrams lowers blood pressure even further).

The diet recommends eliminating or reducing:

- 4-5 servings of nuts, seeds, dry beans and peas.
- 5 or fewer servings of sweets.

## RESOURCES

National Heart, Lung and Blood Institute  
[www.nhlbi.nih.gov/health/health-topics/topics/dash](http://www.nhlbi.nih.gov/health/health-topics/topics/dash)

UK Gill Heart & Vascular Institute  
859-257-1000 or 1-800-333-8874 (toll free)  
[ukhealthcare.uky.edu/gillheart](http://ukhealthcare.uky.edu/gillheart)

For more information or to make an appointment,  
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# HEALTHY WEIGHT

## WHAT'S YOUR HEALTHY WEIGHT?

With so much confusing information out there, it can be hard to know what a healthy weight really is. Obesity is determined by the percentage of body fat and weight, according to the National Heart, Lung and Blood Institute (NHLBI).

Having a large percentage of body fat, regardless of how much you weigh, is unhealthy. You could be of normal weight or even underweight and still have an unhealthy amount of body fat. People who have more muscle might weigh more than those who do not, but they have a lower amount of body fat.

According to NHLBI guidelines, an evaluation of whether you are overweight involves using three key measures:

- Body mass index (BMI)

- Waist circumference

- Risk factors for diseases and conditions associated with obesity.\*

\*These include high blood pressure, coronary artery disease, a high level of LDL ("bad") cholesterol, high triglycerides, high blood sugar, and smoking.

## BODY MASS INDEX

The first measurement to find out whether you are overweight or obese involves determining your body mass index, or BMI.

To calculate your BMI, multiply your weight in pounds by 703, then divide by your height in inches. Divide by your height in inches again.

$$\text{BMI} = \frac{(\text{Weight in Pounds} \times 703)}{(\text{Height in inches} \times \text{Height in inches})}$$

For example, if you weigh 162 pounds and are 69 inches (5 feet 9 inches) tall, your BMI is 23.9, or  $(162 \times 703) \div (69 \times 69)$ , and is normal.

- A BMI of 18.4 or below: Underweight

- A BMI of 18.5 to 24.9: Normal

- A BMI of 25 to 29.9: Overweight

- A BMI of 30 or greater: Obese

For people who are considered obese or those who are overweight and have two or more risk factors (like high blood pressure, diabetes, abnormal blood fats, smoking, or coronary artery disease), the NHLBI guidelines recommend losing weight.

Although BMI is a reliable indicator of total body fat, it does have some limits. It may overestimate body fat in athletes and others with a muscular build. It may underestimate body fat in older adults and in others who have lost muscle mass.

## BELLY FAT OR WAIST CIRCUMFERENCE

Another way to determine whether you are obese or overweight is to measure your belly

fat. This can predict the risk for diseases associated with obesity. Determine your waist circumference by placing a measuring tape snugly around your waist. Your waist circumference is a good indicator of your belly fat. Your risk for diseases related to obesity increases with a waist measurement of more than 40 inches in men and more than 35 inches in women.

You should use your belly fat measurement along with your BMI to determine your risk.

People who are overweight (BMI of 25 to 29.9), but don't have a large waist measurement and have fewer than two risk factors may need only to prevent additional weight gain rather than to lose weight.

If you are overweight and have other risk factors for diseases related to obesity, you should lose weight. If you are obese, you should lose weight even if you have no other risk factors.

## SKIN FOLD THICKNESS

A third way to determine whether you are obese or overweight is to have your skin fold thickness measured. This measurement is taken around the triceps (muscles of the upper arm), on the shoulder blades, and on the hips. The results can determine whether your weight is from muscle or from fat.

## RESOURCES

UK Gill Heart & Vascular Institute  
859-257-1000 or 1-800-333-8874 (toll free)  
[ukhealthcare.uky.edu/gillheart](http://ukhealthcare.uky.edu/gillheart)

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# WOMEN AND HEART ATTACKS

Heart disease is the No. 1 killer of women in the United States. Annually more than 260,000 women in the U.S. die from cardiovascular disease, about twice the number who die of all forms of cancer combined and six times the number who die of breast cancer. It's also higher than the number of men who die of heart attacks.

Yet, despite a gradual increase in awareness over the last few years, cardiovascular disease and heart attack are still often considered a problem only for men.

## SYMPTOMS

Many women lose their lives because when they have a heart attack (also called an acute myocardial infarction or AMI), they do not recognize the symptoms and do not seek immediate treatment.

The most commonly known symptom of a heart attack is chest pain. But many women never have chest pain at all. Symptoms more common in women include:

- Discomfort that radiates to the neck, back or arm.
- Shortness of breath.
- Nausea or vomiting.
- Numbness, tingling or weakness in arms or legs.
- Sudden changes in vision or speech.
- Unusually severe headache.

One of the problems is that these symptoms are less likely to suggest a heart attack either to a layman or health care professional.

## WHAT CAN WOMEN DO?

There are three things can do to lower their chances of dying of a heart attack:

- Know their risk factors.
- Work to decrease those risk factors.
- Know the signs of heart attack, and take immediate action if they arise.

## RISK FACTORS

Some risk factors cannot be changed. They include:

- Increasing age.
- Family history.
- Race – Women of African heritage are more likely to have a heart attack than women of European heritage and are more likely to die when they do.
- Previous heart attack or stroke or TIA (transient ischemic attack or "mini-stroke").

Risk factors that can be modified through lifestyle choices and medication include:

- Smoking or daily exposure to secondhand smoke.
- Birth control pills (among women who also smoke).
- High cholesterol.

- High blood pressure.
- Physical inactivity.
- Obesity and overweight.
- Diabetes.
- High triglyceride levels.
- Excessive alcohol intake.
- Individual response to stress.

If you know or suspect that you have one or more of these risk factors, talk to your doctor about how you can make healthy changes to prevent a heart attack before it happens.

## WHEN TO TAKE ACTION

If you do experience any symptoms associated with a heart attack, fast response is key. For the best chance of survival, care needs to begin within an hour of the beginning of symptoms. Many women who suffer heart attacks, as many as 25 percent to 50 percent, wait four hours or more. With faster treatment the chance of dying decreases by nearly half.

Three phases of delay have been identified. The time required for the patient or bystander to recognize heart attack symptoms, the time between recognition and arrival at an emergency department (the action phase), and the time between arrival and the initiation of advanced care. The recognition and action phase account for the majority of the delay.

## TREATMENTS

Percutaneous coronary intervention is the insertion of a small tube with a balloon tip at the groin. The tube is threaded through lower arteries until it reaches the coronary arteries of the heart. The balloon is then inflated to open the arteries. Once the coronary arteries are open and blood flow is restored, a wire mesh tube (stent) is placed in the arteries to keep them open.

Thrombolytic agents are drugs used to break down a blood clot (thrombus) and restore blood flow. Thrombolytic agents are also

effective for stroke victims if initiated quickly. Research has shown that education and awareness among women of heart attack symptoms and need for action is just as important as the availability and types of health care provided.

## RESOURCES

**American Heart Association:**  
[www.heart.org](http://www.heart.org)

**Women's Heart Foundation**  
[www.womensheart.org](http://www.womensheart.org)

**UK Gill Heart & Vascular Institute**  
859-257-1000 or 1-800-333-8874 (toll free)  
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# EXERCISE STRESS TEST

An exercise stress test is one of the very first non-invasive tests that your doctor may order if you are thinking about starting an exercise program or have risk factors for heart disease such as strong family history, obesity, shortness of air, chest discomfort, or pain with activity.

An exercise stress test is a diagnostic test that shows how your heart responds to exercise. This test tells your healthcare provider if there is adequate blood flow to your heart, how you tolerate exercise, how your heart pumps at different levels of activity and if you have any heart rhythm abnormalities. This test records your heartbeat while you walk on a treadmill or ride a stationary bike. This test can also be referred to as a stress electrocardiogram (ECG/EKG).

## DURING YOUR TEST

You will arrive at the location of the test; this might be at your provider's office, a clinic or at the hospital. Small electrodes will be placed on your chest to monitor your heart rate and rhythm during the test. Your blood pressure will also be monitored. This monitoring will take place before the test, during the test and after the test. You will be shown how to use the machine, either a treadmill or stationary bike. You will then be asked to exercise. Expect that it will be easy at first but then gradually get harder, as the speed and incline increase every few minutes. This is done to make your heart work harder.

You will exercise as long as you can or until you are asked to stop. The exercise portion of a stress test generally lasts less than 15 minutes.

After you stop exercising, you will be asked to sit or lie down while your heart rate and blood pressure are monitored until your heart rate returns to normal. Following the test, you may resume normal activities unless otherwise informed. Your medical provider will use your test results to determine your plan of care.

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# Peripheral Vascular Disease

## What is Peripheral Vascular Disease

Peripheral Vascular Disease (PVD) is caused by a buildup of plaque in blood vessels of the legs. Plaque is made up of bad cholesterol which collects on the walls of blood vessels. As the buildup of plaque becomes thicker over time it obstructs blood flow to the legs and feet. Untreated PVD may lead to strokes, heart attacks and other serious circulatory problems. The good news is that with a few simple tests the diagnosis can be made and treatment options are readily available.

## What are the symptoms of PVD?

The first symptom of PVD is often claudication which is a discomfort or painful cramping in one or both legs.

Other symptoms may include:

- Skin on the lower legs may be cool to touch, thin or shining. Sometimes there are discolorations of the lower leg that looks like a bruising, but they do not go away. If the skin turns black or has a wound that does not heal this is an emergency and you should seek medical attention quickly.
- Lower extremity fatigue
- Pain such as burning and aching at rest, commonly in the toes and at night while lying flat
- Erectile dysfunction (ED) or impotence

## Who is at risk for PVD?

Some risk factors we are born with or we may develop over time because of family history such as heart disease, high blood pressure and elevated cholesterol or triglycerides. Other risk factors include:

- Over 50 years old
- Diabetes
- Smoking or tobacco use
- Obesity
- Physical inactivity

## What are the treatments for peripheral vascular disease?

Once PVD is diagnosed treatment might be as simple as increasing physical activity, smoking cessation and diet modification. Other treatment options may include cholesterol lowering medication, medications to decrease your blood pressure, improve blood flow or control your blood sugar, stenting of a blocked vessel, angioplasty and bypass grafts. Take the self-test below to see if you are at risk for PVD.

## Should I consult a physician?

Answers to these questions will help determine if you are at risk for PVD. Circle "Yes" or "No":

- |  |     |    |
|--|-----|----|
| 1. Do you have foot, calf, buttock, hip or thigh discomfort (aching, fatigue, tingling, cramping or pain) when you walk which is relieved by rest? | YES | NO |
| 2. Do you experience pain at rest in your lower leg(s) or feet?  | YES | NO |
| 3. Do you experience foot or toe pain that often disturbs your sleep?  | YES | NO |
| 4. Are your toes or feet pale, discolored or bluish?   | YES | NO |
| 5. Do you have skin wounds or ulcers on your feet or toes that are slow to heal (8-12 weeks)?  | YES | NO |

*The more "Yes" answers you have, the more important it is for you to ask your doctor about PVD.*



# ENHANCING CARDIOVASCULAR CARE **ACROSS KENTUCKY**

The goal of the UK Gill Heart & Vascular Institute Affiliate Network is to enhance access to high-quality cardiovascular care across the region by partnering with local community hospitals and medical centers. Through the Gill Affiliate Network, members enjoy access to a range of benefits and services, including cardiovascular-specific education and training, achievement and maintenance of subspecialty accreditations, access to Gill faculty and staff, networking and partnering initiatives, co-marketing and co-branding opportunities, clinical cardiology coverage (pending availability), and support for cardiac program growth and development.

Each member hospital receives personalized and customized attention from the Gill Affiliate Network staff to address their needs across the CV spectrum. By working together, our goal is to provide the right care in the right place at the right time. This ensures that the full complement of heart care, from medical cardiology to vascular and CT surgery, is accessible to residents across the state and allows patients to receive local care for as long as possible.

To learn how your hospital would benefit from participating in the Gill Heart & Vascular Institute Affiliate Network, contact Rebecca Craft, Associate Director of Network Development, at 859-285-8083 or [rebecca.craft@uky.edu](mailto:rebecca.craft@uky.edu).





**Administration and network support**

- Access to Network Medical Director who oversees mission and operation of Affiliate Network
- Dedicated assistance from Network Administrator and Clinical and Quality Director
- Opportunity for UK Voluntary Faculty Appointment

**Examples**

Annual executive meeting, digital warehouse, Gill Affiliate Network meeting.



**Program development**

- Cardiac program support
- Cardiac program development
- Cardiac program quality review
- Development of policies and procedures
- Cardiac nursing consulting
- Cardiac specialty pharmacy consulting
- Gill protocols and educational information

**Examples**

Affiliate physician support, shared protocols.



**Professional education and training**

- Educational programs and training opportunities
- Gill-sponsored conferences and symposia
- On-site educational programming
- Gill faculty and staff
- Observation and shadowing experiences

**Examples**

Monthly cardiovascular webinar series, Gill Mini Fellowship program, Gill Backstage experiences, cardiovascular conferences, unique educational activities, customized training opportunities.



**Community outreach and education/marketing and public relations**

- Consultation in planning cardiac screening programs
- Co-sponsorship of cardiac screenings
- Co-sponsorship of community events
- Joint funding for co-sponsorship of community outreach and education
- Use of Gill brand on advertising and promotional items
- Consultation in developing cardiac-specific marketing plans
- Consultation in developing marketing efforts to referring providers
- Access to Gill marketing materials and templates

**Examples**

Monthly marketing meeting, affiliate events (health fairs, heart walks, etc.), social media promotion, co-branded patient education.



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# ATRIAL FIBRILLATION

Atrial fibrillation, also known as AFib or AF, is a common type of heart arrhythmia – a problem with the rate or rhythm of the heartbeat in which the heart can beat too quickly, too slowly or irregularly.

During AFib, the two upper chambers of the heart, called the atria, quiver quickly and irregularly (fibrillate) rather than beating efficiently. This creates sluggish movement of blood into the ventricles, which are the lower chambers of the heart.

AFib can cause blood to clot in the heart, leading to the possibility of stroke. It can also contribute to heart failure and fatigue.

At least 2.7 million Americans have AFib. It can happen rarely or intermittently, and it can become a long-term problem.

## RISK FACTORS

The risk for AFib increases with age, and those who have a close relative with AFib have a greater risk of developing it. Other factors that can lead to AFib include:

- High blood pressure.
- Obesity.
- Diabetes.
- Heart failure.
- Ischemic heart disease.
- Hyperthyroidism.
- Chronic kidney disease.
- Heavy alcohol use.

Additionally, AFib can happen to otherwise healthy people because of stress, fatigue, heavy caffeine intake or strenuous exercise.

## SYMPTOMS

A person who has AFib might not notice the symptoms, which can include:

- General fatigue.
- Rapid and irregular heartbeat.
- Fluttering or “thumping” in the chest.
- Dizziness.
- Shortness of breath and anxiety.
- Weakness.
- Faintness or confusion.
- Fatigue when exercising.
- Sweating.
- Chest pain or pressure.

## DIAGNOSIS

The diagnosis of AFib is commonly confirmed through one of these methods:

**EKG:** An EKG is a test in which electrodes are attached to the chest in order to show how fast the heart is beating and its rhythm, as well as the strength and timing of electrical signals as they pass through the heart.

**Holter monitor:** The patient wears a small, portable, battery-powered EKG machine to record heartbeats for 24 to 48 hours during normal activities.



**Event monitor:** An event monitor, similar to a Holter monitor, is typically used for a longer period. A patient might use an event monitor that requires them to push a button when symptoms occur or the monitor might start automatically when it senses abnormality.

## TREATMENT

Healthcare professionals can choose from a range of treatments for AFib. Medication can reduce the risk of blood clots and stroke; other medicines can help regulate the heart's rhythm. The doctor also might recommend that the patient's heart be given low-energy shocks to restore its normal rhythm.

Other options include:

**Pacemaker or defibrillator implantation:** These devices, installed under the skin on the chest, use electrical signals to help the heart beat properly.

**Catheter ablation:** A wire is threaded to the heart through a vein in the leg or arm and radio waves are used to break up tissue that might be obstructing electrical signals within the heart.

**Maze procedure:** A surgeon makes small cuts or burns in the atria. The scar lines prevent the disorganized electrical signals that cause AFib.

## RESOURCES

**American Heart Association.** Provides information about diagnosis, treatment and living with AFib, as well as stories of those who have undergone successful treatment.  
1-800-242-8721  
[www.heart.org](http://www.heart.org)

**UK Gill Heart & Vascular Institute**  
859-257-1000 or 1-800-333-8874 (toll free)  
[ukhealthcare.uky.edu/gillheart](http://ukhealthcare.uky.edu/gillheart)

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# BLOOD PRESSURE

## BLOOD PRESSURE BASICS

A blood pressure is the measurement of the force of blood pushing against the walls of your arteries. Each time the heart beats, it pumps blood into the arteries. Your blood pressure is at its highest when the heart beats, pumping the blood.

## WHAT IS HIGH BLOOD PRESSURE?

When you have high blood pressure, or hypertension, the force of blood against your artery walls is too strong. High blood pressure can damage your arteries, heart and kidneys if it is not treated. With high blood pressure, the heart works harder, your arteries take a beating, and your chances of a stroke, heart attack and kidney problems are greater.

Women must be particularly sensitive to high blood pressure. Conditions that can increase blood pressure in women include:

**Pregnancy** - Women with chronic or preexisting high blood pressure are more likely to have certain complications during pregnancy than women with normal blood pressure. Some women develop high blood pressure while they are pregnant often called gestational hypertension.

**Oral Contraceptives** - Women taking oral contraceptives experience a small but detectable increase in both systolic and diastolic blood pressure, usually in the

normal range. Talk to your doctor about a possible rise in blood pressure and what you can do about it. Women age 35 and older who smoke cigarettes and take oral contraceptives are at even greater risk for heart disease and stroke and are encouraged to quit smoking.

**Hormone Replacement Therapy** - A few women may experience a rise in blood pressure if they are undergoing hormone therapy. Women treated with hormone replacement therapy should have their blood pressure frequently monitored.

## WHAT IS LOW BLOOD PRESSURE?

If your blood pressure is less than 90/60, you have low blood pressure, often called hypotension. In healthy people, low blood pressure is a sign of good heart and blood vessel health. Sometimes, low blood pressure can be a signal of an underlying problem—especially in seniors. Chronic low blood pressure is almost never serious. Low blood pressure can be caused by pregnancy, diabetes or over-the-counter medications.

## WHAT DO THOSE NUMBERS MEAN?

A blood pressure is always given as two important numbers, the systolic and diastolic pressures. The systolic measurement, the top reading is the pressure in the vessels while the heart is beating

(contracting). The diastolic measurement, the bottom number, is the pressure in the vessels when the heart is resting between beats.

A blood pressure reading between 90/60 and 120/80 is considered normal.

A blood pressure reading below 90/60 is considered low.

A blood pressure reading of 140/90 or higher is considered high.

My blood pressure is: \_\_\_\_\_

## DIAGNOSING HIGH BLOOD PRESSURE

Your doctor will check your blood pressure several times on different days before diagnosing you with high blood pressure. Blood pressure is checked with a quick, painless test using a stethoscope or electronic sensor and a blood pressure cuff. Best blood pressure readings are taken when you are relaxed.

Other tips to follow for accurate blood pressure readings include.

Do not drink coffee or smoke cigarettes 30 minutes before having your blood pressure taken.

Go to the bathroom before the reading. Having a full bladder can change your blood pressure reading.

Wear short sleeves.

Sit for five minutes before the test.

## MAINTAIN HEALTHY BLOOD PRESSURE

Be sure to maintain a normal weight.

Reduce sodium intake to about one teaspoon of salt a day.

Exercise at least 30 minutes a day.

Limit alcohol intake.

Be sure to get 3,500 mg. of potassium in your diet every day.

Maintain a diet that is rich in fruits, vegetables and low-fat dairy products, with reduced amounts of saturated and total fats.

## MAINTAIN HEALTHY BLOOD PRESSURE

Nearly one in three American adults has high blood pressure.

Once high blood pressure develops, it usually lasts a lifetime. But, it can be treated and controlled.

High blood pressure is called the silent killer because it usually has no symptoms.

## RECOMMENDATIONS

If you have high blood pressure, discuss your options with your primary care provider. If you are being treated for high blood pressure and are still experiencing high blood pressure, talk to your doctor about a referral to a cardiologist who may be able to offer other treatment alternatives.

## RESOURCES

UK Gill Heart & Vascular Institute  
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National Heart, Lung and Blood Institute  
301-592-8573  
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# ECHOCARDIOGRAM

An echocardiogram (or “echo”) is a test that uses sound waves to record the activity of the heart. The test also shows abnormal rhythms, and it can sometimes detect heart muscle damage. A doctor will recommend this test if there are signs of heart trouble. The test is also known as a transthoracic echocardiogram.

The echo test can’t harm you, and it has no side effects.

## WHAT TO EXPECT

The test usually takes less than an hour and requires no advanced preparation. The person giving the test can see a picture of the heart on a screen. He or she records the images for a doctor to review.

The test takes place in a quiet, dark room.

The patient will be asked to remove clothing from the waist up. Female patients may wear a gown.

The technician will apply gel to the patient’s chest. The gel helps sound waves reach the heart.

A device called a transducer, which looks like a wand, will be moved around on the chest. The transducer sends waves of sound that bounce off the heart, creating an “echo” that’s translated into pictures of the heart in action.

The patient might be asked to lie in a certain position or breathe in a certain way to improve the quality of the images.

## TRANSESOPHAGEAL ECHOCARDIOGRAM

This test, also known as a TEE, might be ordered if a doctor needs a clearer view of the patient’s heart. In this type of echo, the transducer, attached to a flexible tube, is inserted down the throat into the esophagus, which is the passage from the mouth to the stomach. This angle provides a more detailed picture of the heart and major blood vessels near it. For this test, medicine might be given to help the patient relax.

## MORE INFORMATION

American Heart Association:  
800-242-8721  
[www.heart.org](http://www.heart.org)

American Society of Echocardiography:  
919-861-5574  
[www.asecho.org](http://www.asecho.org)

UK Gill Heart & Vascular Institute  
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fat. This can predict the risk for diseases associated with obesity. Determine your waist circumference by placing a measuring tape snugly around your waist. Your waist circumference is a good indicator of your belly fat. Your risk for diseases related to obesity increases with a waist measurement of more than 40 inches in men and more than 35 inches in women.

You should use your belly fat measurement along with your BMI to determine your risk.

People who are overweight (BMI of 25 to 29.9), but don't have a large waist measurement and have fewer than two risk factors may need only to prevent additional weight gain rather than to lose weight.

If you are overweight and have other risk factors for diseases related to obesity, you should lose weight. If you are obese, you should lose weight even if you have no other risk factors.

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# OUTDOOR EXERCISE

Studies show Americans are spending more time indoors being inactive, which is one reason more than one-third of Americans are considered obese. Even a moderate amount of physical activity can have big benefits, including reduced weight, longer lives and greater well-being.

If you're just starting to exercise or you have health concerns, always check with your doctor. But when the weather is warm, it's a great time to head outside for fun, healthy activities. Here are a few suggestions to help you and your family get active.

## IN THE WATER

Water activities can be fun for all types of people, from patient fishing enthusiasts to bold whitewater kayakers. Swimming is a great full-body workout, and many community organizations offer swimming lessons for all ages. Just about any activity around the water burns calories, but if you're looking for a vigorous workout, grab a paddle. Rowing a canoe, kayak or boat works all the major muscle groups.

You might want to try canoeing or kayaking with veteran paddlers first. Paddling clubs often have classes to introduce beginners to basic skills, safety rules and equipment. Guided trips are common in many areas, and you can often rent canoes and kayaks.

Which watercraft is right for you? That depends on your goals. Both canoes and

kayaks work well for a casual or fitness-oriented paddle on relatively still water, such as a lake. Both can be suitable for rivers, depending on the conditions. Specialized canoes and kayaks match various types of water and skill levels.

Whatever watercraft you use, you and everyone who joins you will need to wear a Coast Guard-approved personal flotation device that fits properly.

## TAKING A HIKE

Walking is one of the best exercises and just about anybody can do it. No special skills required.

The idea of hiking might make you think of long, steep trails covered with pine needles. Yet hikes can be urban or woodsy, long or short, hard or easy.

Beginners can start with short, level routes close to home. You will want to bring a bottle of water to stay hydrated and walking shoes that fit well to support and protect your feet. You can plan hikes around your interests, too. Perhaps you'd like to try bird-watching or scope out historic sites. Some hikers are ready for more of a challenge, like half-day or full-day hikes on weekends.

For longer hikes, be sure to carry a backpack with these vital items:

- Water
- Snacks
- Map

- Compass
- First aid kit
- Pocket knife
- Flashlight
- Matches
- Toilet paper
- Sunglasses
- Sunscreen
- Clothing for all possible weather conditions (rainy, windy, cold, hot)

Make sure you hike with a friend, or bring a dog if you plan to hike alone, and never hike after dark. Build up experience and knowledge before you try an overnight backpacking trip. Classes and other information from outdoor groups can provide valuable information, such as how to find your way around in the wilderness.

## ROLLING ALONG

Like hiking, in-line skating can suit a lot of fitness levels and personal styles. Fast, vigorous skating or racing can give you a heart-pounding aerobic workout. A simple spin around the park can provide children and adults alike with a fun way to get moving outdoors.

If you want to try in-line skating, consider renting the skates (and all the safety gear) to get started. Choose skates that fit your feet snugly, and wear a helmet, wrist guards, and elbow and kneepads. Start on a smooth, flat surface without hazards like rocks, oil or traffic. Learn and practice moving forward, stopping and turning.

Instructors can teach the basics. Be sure to skate under control, yield to pedestrians and follow the rules of the road for everyone's safety.

## PEDAL AROUND TOWN

Bicycling is a great way to get around, work out and see the sights. Cycling can appeal to all ages and abilities.

It's important to find the right bike for the type of riding you plan to do, such as

mountain biking or touring. A bike that fits you is vital, too. The staff at a good bike retailer can teach you how to choose the best bike and gauge the fit.

Stay safe by wearing a well-fitting bike helmet, following traffic laws and keeping visible with reflective clothing. You will also want to carry water with you at all times and keep hydrated. If you do off-road or trail riding, you'll need other safety gear, such as a full-face helmet and shin pads.

## RESOURCES

UK Gill Heart & Vascular Institute  
859-257-1000 or 1-800-333-8874 (toll free)  
[ukhealthcare.uky.edu/gillheart](http://ukhealthcare.uky.edu/gillheart)

For more information or to make an appointment, visit or call





Cardiovascular & Thoracic Associates



# PERIPHERAL ARTERIAL DISEASE

## WHAT IS PERIPHERAL ARTERIAL DISEASE?

Peripheral arterial disease, also known as peripheral artery disease or PAD, is the narrowing or blocking of blood vessels that run from the heart to the limbs and organs; the arteries in the legs are most commonly affected.

The restricting of the arteries is caused by a buildup of plaque -- a combination of fat, cholesterol and other substances in the blood. This condition is called atherosclerosis.

PAD is dangerous because those who have it are more likely to have heart disease, heart attacks or strokes.

## RISK FACTORS

Some risk factors for peripheral arterial disease can't be controlled. For example, senior citizens and those with personal or family history of PAD are most likely to have it.

However, a person can control other risk factors by modifying behavior. These include:

- Cigarette smoking
- Diabetes
- High blood pressure
- High blood cholesterol
- Obesity
- Physical inactivity

All of these risk factors tend to damage the arteries. When this happens, a healing process begins that includes plaque forming at the site of the damage. The buildup of plaque narrows the artery. Also, plaque can break off at the site, causing a blood clot to form. Clots can further narrow the artery.

## EFFECTS & SYMPTOMS

Many people with PAD see no symptoms until the condition is advanced.

When blood flow is restricted, damage to the organs or limbs can result. When PAD is left untreated, tissue can die, leading to gangrene. Typical symptoms of PAD include:

- Cramping in the legs, hips or buttocks during exercise that eases while resting.
- Pain in the toes or feet while resting.
- Open wounds, often at pressure points in the feet, that heal slowly or not at all.
- Pale or bluish skin.
- Poor toenail growth.
- Decreased hair growth on the legs or feet.

## DIAGNOSIS

In addition to the primary care doctor, a vascular specialist or cardiologist might be involved in diagnosing PAD. They will ask about the patient's medical history and that of family members, and a physical exam will be given.



Next, a test called the ankle-brachial index might be given. The test compares the blood pressure in the ankle to the blood pressure in the arm. It might take 10 to 15 minutes. Typically, the blood pressure in the ankle is about 90 percent of that in the arm; if significant blockage is present, it might be less than 50 percent.

## PREVENTION & TREATMENT

Treatment focuses on managing risk factors to prevent the progression of PAD through lifestyle changes and medication. For some people with advanced PAD, a procedure or surgery might be necessary.

Steps to treat PAD and manage risk factors can slow or reverse the symptoms. These steps might include:

- Quitting smoking.
- Exercise, possibly starting with a simple walking regimen.
- Following a diet that's low in trans fats, such as the DASH diet.
- Taking medication to reduce blood pressure and cholesterol.
- Losing weight.

Procedures to treat advanced PAD include:

- **Angioplasty:** A catheter with a balloon tip is inserted through a small incision and threaded through the body to the site of the blocked artery. The balloon is then inflated, widening the artery by forcing plaque outward to the arterial wall. During this procedure, a stent -- a wire mesh cylinder -- might be inserted. Medicine might be inserted through the catheter to dissolve a blood clot, or a device might be inserted to remove a clot.
- **Atherectomy:** Plaque is shaved or cut from the wall of the artery.
- **Bypass grafting:** A synthetic tube or a blood vessel from another part of the

body is surgically implanted so blood can go around a closed artery.

## RESOURCES

American Heart Association:  
[www.heart.org](http://www.heart.org)

National Heart, Lung and Blood Institute:  
[nhlbi.nih.gov/health-topics/peripheral-artery-disease](http://nhlbi.nih.gov/health-topics/peripheral-artery-disease)

UK Gill Heart & Vascular Institute  
859-257-1000 or 1-800-333-8874 (toll free)  
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For more information or to make an appointment, visit  
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Cardiovascular & Thoracic Associates



# WOMEN AND HEART ATTACKS

Heart disease is the No. 1 killer of women in the United States. Annually more than 260,000 women in the U.S. die from cardiovascular disease, about twice the number who die of all forms of cancer combined and six times the number who die of breast cancer. It's also higher than the number of men who die of heart attacks.

Yet, despite a gradual increase in awareness over the last few years, cardiovascular disease and heart attack are still often considered a problem only for men.

## SYMPTOMS

Many women lose their lives because when they have a heart attack (also called an acute myocardial infarction or AMI), they do not recognize the symptoms and do not seek immediate treatment.

The most commonly known symptom of a heart attack is chest pain. But many women never have chest pain at all. Symptoms more common in women include:

- Discomfort that radiates to the neck, back or arm.
- Shortness of breath.
- Nausea or vomiting.
- Numbness, tingling or weakness in arms or legs.
- Sudden changes in vision or speech.
- Unusually severe headache.

One of the problems is that these symptoms are less likely to suggest a heart attack either to a layman or health care professional.

## WHAT CAN WOMEN DO?

There are three things can do to lower their chances of dying of a heart attack:

- Know their risk factors.
- Work to decrease those risk factors.
- Know the signs of heart attack, and take immediate action if they arise.

## RISK FACTORS

Some risk factors cannot be changed. They include:

- Increasing age.
- Family history.
- Race – Women of African heritage are more likely to have a heart attack than women of European heritage and are more likely to die when they do.
- Previous heart attack or stroke or TIA (transient ischemic attack or “mini-stroke”).

Risk factors that can be modified through lifestyle choices and medication include:

- Smoking or daily exposure to secondhand smoke.
- Birth control pills (among women who also smoke).
- High cholesterol.

- High blood pressure.
- Physical inactivity.
- Obesity and overweight.
- Diabetes.
- High triglyceride levels.
- Excessive alcohol intake.
- Individual response to stress.

If you know or suspect that you have one or more of these risk factors, talk to your doctor about how you can make healthy changes to prevent a heart attack before it happens.

## WHEN TO TAKE ACTION

If you do experience any symptoms associated with a heart attack, fast response is key. For the best chance of survival, care needs to begin within an hour of the beginning of symptoms. Many women who suffer heart attacks, as many as 25 percent to 50 percent, wait four hours or more. With faster treatment the chance of dying decreases by nearly half.

Three phases of delay have been identified. The time required for the patient or bystander to recognize heart attack symptoms, the time between recognition and arrival at an emergency department (the action phase), and the time between arrival and the initiation of advanced care. The recognition and action phase account for the majority of the delay.

## TREATMENTS

Percutaneous coronary intervention is the insertion of a small tube with a balloon tip at the groin. The tube is threaded through lower arteries until it reaches the coronary arteries of the heart. The balloon is then inflated to open the arteries. Once the coronary arteries are open and blood flow is restored, a wire mesh tube (stent) is placed in the arteries to keep them open.

Thrombolytic agents are drugs used to break down a blood clot (thrombus) and restore blood flow. Thrombolytic agents are also

effective for stroke victims if initiated quickly. Research has shown that education and awareness among women of heart attack symptoms and need for action is just as important as the availability and types of health care provided.

## RESOURCES

**American Heart Association:**  
[www.heart.org](http://www.heart.org)

**Women's Heart Foundation**  
[www.womensheart.org](http://www.womensheart.org)

**UK Gill Heart & Vascular Institute**  
859-257-1000 or 1-800-333-8874 (toll free)  
[ukhealthcare.uky.edu/gillheart](http://ukhealthcare.uky.edu/gillheart)

**For more information or to make an appointment, visit or call**





Cardiovascular & Thoracic Associates



# PREPARE FOR YOUR BEST YEAR OF FITNESS

New Year's resolutions are easy to make but sometimes hard to stick to. Some of the most common resolutions are related to improving physical fitness.

Before you begin any new exercise routine, it's important to check with your doctor first, especially if you have any conditions such as asthma, arthritis, or heart, kidney or lung disease. But for almost everyone, even moderate activity can have major benefits to your health.

By following this month-by-month approach, you can make sure your fitness goals stay on track all year long.

## JANUARY

Set manageable goals. Instead of trying to lose 30 pounds, aim for losing five pounds a month. Invest in a few sessions with a personal trainer who will point you in the right direction and help you get going.

## FEBRUARY

Focus on fuel. Nutrition is an important part of physical fitness. Keep a daily log of what you eat and how you feel. As your body gets used to more activity, you'll naturally crave less fat and sugar and more vegetables, fruits and grains. You'll need protein to build muscle, so make sure your daily intake meets your new demands.

## MARCH

Check your progress. Look at what you've achieved so far and what's missing. Fatigue, aches and pains are signs that you're trying to do too much, too soon. If your progress has slowed down or stopped, change your routine. Getting out of a rut will challenge your body and keep you interested.

## APRIL

Take it outside. Warmer weather means you can start exercising outdoors, or even sign up for a local sports league. Give yourself some fun challenges and keep track of those accomplishments.

## MAY

Pace yourself. Daylight-saving time gives you more hours of sunlight, but don't feel like you have to fill them with constant activity. Build your capabilities slowly.

## JUNE

Take stock of how far you've come. You're halfway through the year, but are you halfway to your goals? Take a look at how your fitness efforts are affecting the rest of your life. Do you feel less stressed and more productive? Hopefully, the answer is yes.

## JULY

Try to push yourself a little more. Go hiking or take long walks on the beach. Enjoy your body's increased energy and capabilities.

## AUGUST

Put your new fitness level to the test. Sign up for a short fun run or start training for a competition you never thought you'd consider entering. Or add spice to your workouts by setting weekly challenges.

## SEPTEMBER

Go back to school. Students are returning to class, and so can you. Sign up for a fitness class that interests you or that brings new discipline to your body, such as yoga or tae-bo.

## OCTOBER

Get in gear. Take advantage of end-of-season sales to treat yourself to some new fitness clothing and accessories. Equip yourself for a sport or exercise that challenges you in a new way.

## NOVEMBER

Kick an addiction. Take advantage of your new feeling of power to gain control over an unhealthy habit. Smoking, shopping, drinking too much alcohol – if some habit has taken over your life, you should now find it easier to quit.

## DECEMBER

Give yourself a present. Take stock of how much better you feel and look, then give yourself a tangible reward for your good work. Buy yourself a new outfit or treat yourself to a special weekend.

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## RESOURCES

UK Gill Heart & Vascular Institute  
859-257-1000 or 1-800-333-8874 (toll free)  
[ukhealthcare.uky.edu/gillheart](http://ukhealthcare.uky.edu/gillheart)

For more information or to make an appointment,  
visit  
or call

# WHAT IS CARDIAC CATHETERIZATION?

A cardiac catheterization is a procedure that looks for blockages or narrowing in the arteries around the heart. Clogged arteries can cause chest pain or lead to a heart attack if not treated.

Your doctor may recommend a cardiac catheterization if you experience chest pain (or angina), shortness of breath or dizziness. It is also suggested for patients who have undergone other testing that showed blockages or narrowing in arteries surrounding the heart.

## THE PROCEDURE

Before the procedure, patients are given medication to help them relax, but are not put completely to sleep. A local anesthetic is injected at the insertion site to prevent pain. During the cardiac catheterization, a straw-like catheter, called a sheath, is inserted into the artery in either your wrist or groin. Then, a long, thin tube, called a catheter, is inserted into the sheath. The catheter is inserted into your artery and guided through your veins toward your heart. Contrast or IV dye is injected through the catheter, and X-ray pictures are taken of the arteries around the heart.

Your doctor will often exchange catheters and take multiple pictures of the heart and surrounding arteries during the procedure. Once all pictures are taken, the catheter and sheath are removed.

Following the procedure, you will remain in bed for a period of time as recommended by your doctor, and you will be given something to eat and drink. Before being discharged, you will be asked to walk to make sure there is no bleeding at the insertion site.

You are not permitted to drive following the procedure. Therefore, a family member or friend must travel with you. When you arrive home, you must limit physical activity for the first two days following the procedure. At your follow-up appointment, your doctor will inform you of your results and discuss your treatment plan.



# WHAT IS A LOOP RECORDER?

Implantable loop recorders are small devices that are placed under the skin of the chest for long-term cardiac monitoring. They record the electrical signals of the heart for up to three years and have remote-monitoring capability.

Because some heart rhythm abnormalities occur infrequently, loop recorders capture these irregularities, which a standard electrocardiogram (EKG) or Holter monitor miss. Loop recorders are generally used for patients who have experienced fainting, dizziness or palpitations (sensations of a rapid or irregular heartbeat) or who have suffered a stroke.

## DURING THE PROCEDURE

Implanting a loop recorder is a minor surgical procedure that takes about 15 minutes and can be done either in a doctor's office or cath lab setting. A medical provider or assistant will escort you to the procedure area where they will prep the skin by applying a local anesthetic, such as lidocaine (similar to when you have dental work done), to your chest. Your doctor will then make a small cut on your chest and implant the device. The incision will be closed with surgical glue or several small stitches and will be covered with a bandage. You may experience tenderness or bruising of the site for up to two weeks. Once implanted, there is no external evidence of the device.

## AFTER THE PROCEDURE

Once the procedure is complete you may return to normal activity. In addition, you will receive instructions on how to set up remote monitoring using a hand-held activator, which records and sends heart transmissions to your doctor. Because your hand-held activator records your heart, you will need to keep it with you at all times. At night, make sure to leave it by your bed so all transmissions can be sent to your doctor. Your provider will notify you with any concerns. Along with the hand-held activator, you will also receive an identification card that must be carried at all times.

Following your implantation, you will still need to visit your doctor regularly. In addition, you need to inform any medical provider that you have an implantable device before any test. While loop recorders are MRI safe, they may set off metal detectors.

# WHAT IS CARDIAC NUCLEAR IMAGING?

Cardiac nuclear imaging, also called a nuclear stress test, measures the flow of blood in the heart at rest and during exercise. This test is sometimes referred to as a “perfusion scan” or a “SPECT MPI” (single photon emission computed tomography myocardial perfusion imaging).

Your doctor may order this test if you have symptoms of heart disease or have been diagnosed with a heart condition. The test can determine if there are areas of scar tissue in your heart or if you have had a prior heart attack. It can also measure how well your heart muscle squeezes and pumps. Nuclear stress testing helps diagnose and guide treatment for various heart conditions.

## DURING YOUR TEST

Nuclear stress testing occurs in several phases. First, pictures of your heart are taken at rest. Then, you exercise on a treadmill or stationary bike for several minutes to increase the rate of blood flow to your heart muscle. For patients who are unable to walk on a treadmill or ride a bike, special medicines are used to artificially increase the heart rate while resting.

After exercising, you are positioned on a scanning bed, where you must lie still for up to 30 minutes. During this time, a small amount of radioactive material called a “tracer” is injected into your bloodstream. A special camera then scans the tracer in your blood as it flows through the heart muscle.

Areas of the heart that have good blood flow absorb the tracer, and areas that are not getting enough blood flow will not absorb the tracer. Poor absorption of the tracer can be a sign of a blocked artery, vessel narrowing or an area of the heart that is not receiving blood, perhaps a result of damage from a heart attack. The tracer leaves the body within hours.

Most people can return to normal activities as soon as the test is complete. Your doctor will let you know when you can expect results and if additional testing is necessary.



# CAROTID DOPPLER ULTRASOUND

A carotid Doppler study – also known as a carotid ultrasound – is an imaging test that examines how blood moves through the carotid arteries. Your doctor may order this test because you have high blood pressure, diabetes, high cholesterol or coronary heart disease.

This study is especially important if you have a family history of stroke or heart disease because it screens for blockages or narrowing of the carotid arteries. You may also need this study if you recently had a stroke or transient ischemic attack (TIA) or if your doctor heard an abnormal sound, called a bruit, from your carotid artery.

## **DURING YOUR TEST**

The carotid Doppler study is a safe and painless test that uses sound waves to examine blood flow through the carotid arteries on each side of the neck. During the procedure, you will lie on an exam table, where you will be scanned. A small ultrasound probe with gel will be placed on your neck. The probe may make noise, and you may feel slight pressure while it takes pictures of your arteries.

The procedure generally lasts around 30 to 45 minutes to scan both sides of your neck. Once the scans are complete, you may resume normal activity. Your doctor will provide further instructions on when to expect results and if additional follow-up testing is necessary.



# WHAT IS A PACEMAKER?

A pacemaker is a small electronic device that is implanted under the skin in the chest to help control an abnormal heartbeat. It is made up of two main components: the pulse generator, which houses the battery and is responsible for regulating the rate of electrical pulses sent to the heart, and electrodes, also known as leads. These leads are insulated wires placed in one or more of the heart's chambers that deliver the electrical pulses the heart needs to adjust its rate.

## WHY DOES MY DOCTOR THINK I NEED A PACEMAKER?

Your doctor may advise you to get a pacemaker if:

- You have been diagnosed with a slow heart rate, called bradycardia.
- You take medications that slow your heart rate down, causing you to feel dizzy or fatigued.
- You have experienced fainting, chest pains or fatigue.
- You are having irregular or fluttering heartbeats.

## DURING THE PROCEDURE

During implantation of the pacemaker, your doctor will:

- Administer sedation.
- Make a small incision under the skin near the collarbone on the left side of your chest to place the generator.

- Place the leads through a vein into the correct chamber of your heart using X-ray monitors. The leads become lodged into the tissue within the heart.
- Connect the other ends of the leads to the generator.
- Close the incision.

## AFTER THE PROCEDURE

The pacemaker will be programmed to help your heart beat at a rate that is right for you. Your doctor may give you special instructions about your physical activity level. Avoid using the arm on the side of the pacemaker insertion until your follow-up appointment. Call your doctor immediately if you develop a fever or other signs of infection.

# EHAC DID YOU KNOW?



[deputyheartattack.acc.org](http://deputyheartattack.acc.org)

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**EHAC**

- Like other diseases, heart attacks have early signs & symptoms
- THESE "BEGINNINGS" MAY OCCUR IN 50% OF PATIENTS
- If recognized, people can be treated before heart damage occurs



### Learn Early Heart Attack Care (EHAC)

- Early Heart Attack Care (or EHAC) education teaches you to recognize the early signs and symptoms of a heart attack. Why? We want you to become an active bystander so you can save a life - *even if it's yours.*



### Prevent a Heart Attack

- Learn the risk factors.
- Understand the difference between men and women.
- Is it a heart attack? Learn the atypical symptoms.



### Save a Life

- If someone collapses, call 9-1-1!
- Perform Hands-Only CPR.
- Find and deploy an AED (Automated External Defibrillator).

**SURVIVE. DON'T DRIVE. CALL 9-1-1**



ACC Accreditation Services

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# Hands-Only CPR

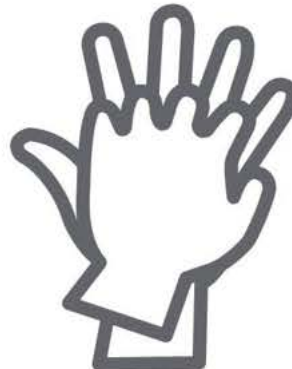
CPR CAN DOUBLE OR EVEN TRIPLE A PERSON'S CHANCE OF SURVIVAL

## Learn the two simple steps:

1 Call 911



2 Push hard & fast in the center of the chest



To learn, watch the 90-second Hands-Only CPR video at [heart.org/handsonlycpr](http://heart.org/handsonlycpr)

**#CPRSAVESLIVES**

## *Before your* **HEART CATH**

- Please arrive at the Hazard ARH Hospital at least one hour prior to your scheduled time.
  - Bring all your medication with you in the original bottles.
  - Bring all insurance cards and a photo ID with you.
  - **NO FOOD** or **DRINK** after midnight the night before your Heart Catheterization.
1. If you take anti-platelet medication like Aspirin, Plavix, or Brilinta, you may **CONTINUE** to take unless instructed by your physician to stop.
  2. If you take blood thinners like Coumadin, Eliquis, or Xarelto, please **STOP** these **48-hours prior** to testing.
  3. If you currently take medications like Metformin and Glucophage, please **STOP** these 48-hours prior to your test.
  4. If you are currently taking Lasix or Furosemide diuretics, **PLEASE ASK YOUR PHYSICIAN** if you should continue or stop these medications before your procedure.



## **CARDIAC CATHETERIZATION** *(Heart Cath)*

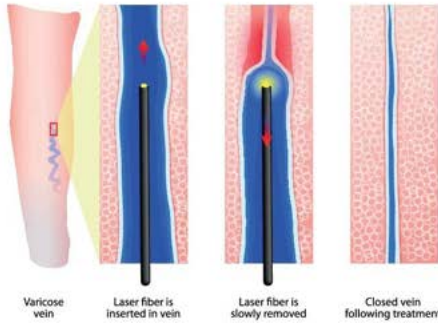
**A Department of Hazard ARH Regional Medical Center**

210 Black Gold Blvd, Suite 210 | Hazard, Kentucky 41701  
606.487.7000





Basic Facts about  
**ENDOVENOUS LASER  
TREATMENT**



- Your doctor uses ultrasound to map out our veins.
- Local anesthetic is given.
- Venous access is obtained much like starting an IV.
- A thin laser fiber is inserted through a tiny entry point.
- Laser energy is delivered to seal the faulty vein.
- It may take several weeks to notice improvement in symptoms after procedure.



Before your  
**ENDOVENOUS LASER  
TREATMENT**

- Please arrive at Hazard ARH Medical Mall and report to MMIC to register **30 minutes before** appointment time.
- Bring Photo ID and insurance cards.
- Once registered, take prescribed sedative given by physician.

**YOUR APPOINTMENT IS SCHEDULED FOR:**

\_\_\_\_ Month      \_\_\_\_ Day      \_\_\_\_ Year

**APPOINTMENT TIME:**

\_\_\_\_ am/pm    RT Leg    \_\_\_\_ LT leg

\_\_\_\_ with Physician

A Department of Hazard ARH Regional Medical Center  
210 Black Gold Blvd, Suit 210 | Hazard, Kentucky 41701

**606.487.7000**



**ENDOVENOUS  
LASER TREATMENT**  
(E.V.L.T.)

A Department of Hazard ARH Regional Medical Center  
210 Black Gold Blvd, Suit 210 | Hazard, Kentucky 41701

**606.487.7000**

## What to Expect with ENDOVENOUS LASER TREATMENT

- EVLT treatment usually takes 45 minutes to 1.5 hours.
- You will receive a mild oral sedative to take 1 hour prior to the procedure. This will make you feel relaxed and slightly drowsy.
- The staff and physician will be able to talk with you to ensure comfortability.
- You may have multiple access sites pending treatment deemed necessary by your physician.
- The whole procedure should be fairly painless and you will be able to walk as soon as the procedure is completed.

- If you take Eliquis or Xarelto **STOP** taking these 2 days prior to your scheduled procedure.
- If you take Coumadin (Warfarin) consult with your physician before stopping this medication.



### IMMEDIATE RESULTS

After treatment, there may be slight swelling and bruising, but that will subside and you will see a significant difference in the appearance of your legs, with minimal-to-no-bruising.

**Varicose vein treatment with the EVLT procedure has proven to be 98% effective.**

More than 1.5 million patients have used this procedure to eliminate varicose veins. Why not find out if it's right for you?

Photos not indicative of all EVLT procedure outcomes. Your results may vary depending on a variety of factors. Please consult with your provider for more information.

