

Heart Disease 101

Special Heart Health Section by Brian Beise

What is heart disease?

The term heart disease does not refer to one condition, but to an array of problems that can occur in the heart. Everything from diseases of the blood vessels to heart rhythm problems to congenital heart defects falls underneath this umbrella term. Frequently, however, the term “heart disease” is used interchangeably with “cardiovascular disease,” which refers to conditions that involve narrow or blocked blood vessels that can lead to a heart attack, chest pain (angina), or stroke.

Some staggering statistics

If you want to truly understand the reach of heart disease, just look at the facts from the Centers for Disease Control and Prevention (CDC). The CDC reports that heart disease is the leading cause of death in the United States—nearly 1 in 3 deaths is caused by heart disease and stroke. Perhaps even more shocking, at least 200,000 of those annual deaths are considered preventable.

Am I at risk?

The American Heart Association separates major risk factors for heart disease into two categories: those that can't be changed, and those that you can modify, treat, or control by changing your lifestyle and taking medicine. The first category includes increasing age (men over 45 and women over 55), genetics, and family history. The second category includes smoking, high blood cholesterol, high blood pressure, physical inactivity, being overweight or obese, and diabetes.



For more information on heart disease and heart health, visit:

heart.org from the American Heart Association (AHA)

cardiosmart.org from the American College of Cardiology

goredforwomen.org from the AHA's Go Red for Women campaign

nhlbi.nih.gov the website of the National Heart, Lung and Blood Institute

strokeassociation.org the website of the American Stroke Association

If you have risk factors in the first category, it becomes even more important to manage and control the ones in the second. Weight loss, exercise, diet, quitting smoking, reducing stress, and having yourself regularly screened can all significantly decrease your chances of suffering from heart disease.



Strokes and heart attacks are medical emergencies and should be treated at the onset of symptoms. If you suspect either one, don't wait to call 9-1-1. Emergency medical services staff can begin treatment when they arrive—sooner than if someone gets to the hospital by car.

Heart Attack 101

The technical name for a heart attack is myocardial infarction. Essentially, it is a partial heart failure. During the event, loss of blood flow to one part of the heart causes an oxygen deficiency and muscle tissue begins to die.

According to the American Heart Association, symptoms of a heart attack include:

- chest discomfort in the center of the chest that lasts more than a few minutes, or chest pain that goes away and comes back
- discomfort in other areas of the upper body, such as the arms, back, neck, jaw or stomach
- shortness of breath, with or without chest discomfort
- a cold sweat, nausea or lightheadedness

Stroke 101

A stroke is sometimes referred to as a cerebral vascular accident. Most strokes are ischemic, meaning, they occur when the arteries to the brain have become narrowed or blocked (usually by a blood clot).

Strokes usually come on suddenly. Typical symptoms include: numbness or weakness of the face, arm and/or leg, confusion, trouble speaking or difficulty understanding speech, difficulty seeing in one or both eyes, trouble walking, and severe headache. The National Stroke Association offers the FAST test for identifying a stroke:

Face – Ask the person to smile. Does one side of the face droop?

Arms – Ask the person to raise both arms. Does one arm drift downward?

Speech – Ask the person to repeat a simple sentence. Does the speech sound slurred or strange?

Time – If you observe any of these signs, call 911 immediately.

Taking time to understand heart issues can go a long way in ensuring you don't fall prey to one of them. Read on to learn about different kinds of heart disease, how to spot them, and—best of all—how to prevent them. ♥

Not Just a Little Heart Attack

One young mother's story



June 16, 2013, was a time of celebration for Star and Clifford Billups of Ooltewah. Only one month earlier, the couple had welcomed their third daughter, Zoe, into the world. With the new addition to the family, the Billups celebrated Father's Day by dining out for a special Sunday breakfast and planning to spend a relaxing afternoon together at home.

Little did anyone realize what the afternoon would hold for the young mother of three.

As Star and her family returned home from breakfast, an odd sensation swept through her chest and down her left arm. She abruptly sat down, wondering if she could have indigestion. As the dull pain intensified, the 36-year-old mother picked up the phone to consult a family friend, also a physician.

After Star described her symptoms, the physician quickly advised her to seek medical care. Star agreed, assuming the pain was totally unrelated to her heart. After all, she didn't sense the "crushing weight of an elephant" on her chest as many people often describe the main symptom of a heart attack.

At a local hospital, blood tests revealed some abnormalities that suggested something was not right with

Star's heart. Recalling the story of another new mother with cardiac problems who had credited Erlanger for saving her life, Star insisted on being transferred to Erlanger for treatment.

Additional tests at Erlanger revealed Star was experiencing a life-threatening emergency. The staff rushed the young mother to the Erlanger Cardiac Catheterization Lab. Robert Huang, M.D., an interventional cardiologist with UT Erlanger Cardiology, quickly performed a cardiac catheterization by inserting a long, thin tube, or catheter, into the radial artery in her wrist. Then he advanced the catheter through the arteries toward her heart to diagnose the problem: a tear in the wall of the left anterior descending coronary artery. The wall of the artery had literally ripped apart and was twisting into a spiral form.

The condition, known as spontaneous coronary artery dissection, can block blood flow into and around the heart – and cause a heart attack because blood flow cannot reach the heart muscle. The cardiac event most often occurs in young, otherwise healthy women who have no major risk factors for heart disease. "Thirty percent of female patients with a spontaneous tear to the coronary artery have recently had a child – like Star," Dr. Huang explains. "In some women, the physical stress of childbirth can weaken the coronary artery and contribute to a rip in the artery wall. The good news is the dissection can often be repaired if the patient seeks immediate medical attention."

In the cath lab, Dr. Huang inserted two stents in the artery and repaired the tear. After several days in the hospital, Star returned home to recuperate, grateful for a second chance at life and the opportunity to raise her three beautiful daughters. "Catching the damage early in the process was definitely in my favor, along with my age," Star says.

"I never had any complications while I was pregnant," she continues, "and I thought I was too young to have this happen. But no matter how old or healthy you are, it can still happen to you."

Today, Star has check-ups every four months to make sure she stays healthy. She also encourages other young mothers not to ignore any suspicious health problems. "It's important to stay healthy and talk to your doctor," she says. "If you have any concerns, get checked out so you can be around to raise your family in the years ahead."



A woman's heart really is different.

Trust yours to the cardiologists who know.

Women's hearts are unique—from the size of the cardiac arteries, to the way blockages develop in those critical vessels. Even symptoms of a heart attack are different, often masquerading as simple nausea or fatigue. Good reasons for women to trust UT Erlanger Cardiology, the region's first providers with a distinct focus on women's cardiology. Together, they're leading the fight against heart disease, the No.1 threat to women's health. It's a different approach—because your heart is different. For an appointment, call 778-DOCS.

