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HEART CARE

New Guidelines Redefine Hypertension

The American Heart Association (AHA) and the American College of Cardiology have redefined the guidelines that determine if a person has hypertension – another name for high blood pressure. A panel of 21 scientists and health specialists spent three years studying more than 900 published studies on high blood pressure and concluded more Americans will be classified at high risk for heart attack, heart disease, stroke and other cardiovascular problems due to hypertension.

Blood pressure is measured in millimeters of mercury and there are two numbers used in assessing the pressure – systolic and diastolic. Systolic blood pressure – the top number – is the force by which the blood pushes against the artery walls when the heart beats. Diastolic – the bottom number – is the pressure between heartbeats, when the heart is at rest. Having a blood pressure of 120/80 is considered normal. Previous guidelines defined hypertension as a blood pressure of 140/90 or above. The new guidelines categorize hypertension as having blood pressure of 130/80. Under the new guidelines, hypertension now affects 46 percent of the adult U.S. population. The AHA believes drawing more attention to high blood pressure will save lives by preventing more strokes and cardiovascular events.

The concern when diagnosing hypertension is a lack of symptoms. It is often referred to as the "silent disease" or "silent killer" because a person with the condition may not notice any symptoms at all. There is some belief that high blood pressure causes sweating, anxiety, sleeping problems and blushing. Having high blood pressure for a short time can

be a normal response to many situations including acute stress and intense exercise. A diagnosis of hypertension normally requires several readings that show high blood pressure over time. If left untreated, high blood pressure can cause damage to the cardiovascular system and internal organs, such as the kidneys. A number of risk factors increase the chances of having hypertension.

- Age: Hypertension is more common in people over 60 years.
- Ethnicity: Some ethnic groups are more prone to hypertension.
- Size and weight: Being overweight or obese is a key risk factor.
- Alcohol and tobacco use: Consuming large amounts of alcohol regularly can increase a person's blood pressure, as can tobacco products.
- Existing health conditions: Cardiovascular disease, diabetes, chronic kidney disease, and high cholesterol levels can lead to hypertension, especially as people get older.

Other factors include:

- Physical inactivity
- A salt-rich diet associated with processed and fatty foods
- Low potassium in the diet
- A family history of high blood pressure
- Poorly managed stress also can contribute.

Physical activity helps control high blood pressure, strengthens the heart and lowers stress levels. A medical study on the benefits of exercise, found that just 10 minutes of exercise a day increased peak oxygen consumption – a measure of cardiovascular fitness. The AHA recommends at least 30 minutes a day at least five days a week of moderateintensity, physical activity for the best results. This can include walking, jogging, cycling or swimming. More vigorous physical activity can further improve the fitness of the heart and lungs. It is suggested to start slowly, and build up as the heart gets stronger.





On September 6, 2016, Cynthia Ravitsky was stuck in a traffic jam on her way to work, listening to Here & Now on National Public Radio (NPR). Author Gayle Forman was discussing her new novel, Leave Me, about a young, overworked mother in New York who does not realize she is having a heart attack.

A resident of Westerville, Cynthia commutes approximately thirty minutes to The Ohio State University at Newark, where she serves as an adjunct math instructor. "About 10 to 15 minutes into my drive I felt a pinching in my chest," Cynthia explained. "It was not painful, but noticeable. About five minutes later I had a tingling sensation in my right arm, almost like it had fallen asleep. I thought it was because I had been leaning it on the console while I drove, but shortly after that I had the same sensation in my left arm," she continued. Thinking it could not possibly be her heart, Cynthia brushed off the symptoms, and told herself she would stop by the Urgent Care or her physician's office on the way home. All the while she was listening to Gayle Forman explain that women's heart attack symptoms vary from men's and often are ignored due to such busy lifestyles.

Cynthia continued to inch along in traffic on State Route 16 toward Newark when she suddenly became very nauseous and broke into a cold sweat. "At this point, I realized that I had a decision to make and the time to make it as I waited in traffic at the Cherry Valley Road intersection. I did not know what was happening, but I knew something was wrong," Cynthia recalled. "Again, I heard the author say – 'Don't ignore the symptoms,' and I made my decision. I called work and had them cancel my class. Then I dialed 911 and

Patient Story – Cynthia Ravitsky

asked them for directions to the nearest hospital, since I knew that the emergency squad would be unable to reach me in the traffic." She made her way to Licking Memorial Hospital (LMH). Not wanting to block the Emergency Department (ED) entrance because she was still uncertain of her medical condition, she parked her car and walked inside to the registration desk. Cynthia said she thought she may be having a heart attack and had just begun to provide her personal information when she collapsed.

"The medical staff immediately went into action, helping me into a wheelchair and to a triage area," she said. After she gave verbal approval to move forward with treatment, she quickly received an intravenous line (IV) and an electrocardiogram (EKG). "I remember looking at the nurse who was doing the EKG and saw her nod her head emphatically to her colleague, acknowledging that I was, in fact, having a heart attack," Cynthia said. Cardiologist Hassan Rajjoub, M.D., arrived quickly and she was transported to the Catheterization Lab for her procedure. Cynthia later learned that she had a 99.9 percent blockage in her right coronary artery.

"The staff was so wonderful and I am extremely lucky that LMH offers this type of treatment," Cynthia said. She noted the staff's excellent teamwork and was complimentary of their efficiency, knowledge and kindness. "They were very attentive to me as a patient, while performing all the technical tasks they had to do. I understood that I was in good hands and felt very secure," she continued. Dr. Rajjoub inserted two stents to open the blockage and Cynthia noted his intensity with his work. "I appreciated his thorough explanations and how hard he worked to care for me."

Approximately sixty-one minutes passed from the time Cynthia entered the Emergency Department (ED) to the time

the balloon was inserted in preparation for re-opening her artery. The procedure has the best results when performed under ninety minutes, ensuring minimal damage to the heart muscle. Cynthia recovered at LMH for three days and appreciated the caring and pleasant nature of the nurses. "They helped me feel better, gathered contact information and assured me that they would communicate with my family and friends as necessary," she said. After her discharge from the Hospital, Dr. Rajjoub recommended cardiac rehabilitation for Cynthia at a follow-up appointment. He stressed the importance of completing the rehabilitation for a healthy recovery. Not only is it common for women to dismiss the symptoms of a heart attack, but often they do not follow through with proper rehabilitation after a life-saving procedure. American Heart Association studies show that it frequently proves problematic for women to care more for others than themselves, continually delaying their own care.

Cynthia transferred to a physician closer to home and attended rehab for several months, also meeting with a dietitian as part of the program. She sees her physician annually, works to maintain a healthy diet and is conscientious about taking her medication properly.

Regardless of her heart attack experience, Cynthia acknowledges that it is still challenging to recognize heart-related symptoms. Physicians emphasize that it is important to know what is normal for your body. Individuals should not ignore any abnormal symptoms and be aware of even small changes. So often heart attacks present differently than what is portrayed in the media and also for men versus women. Understanding and acknowledging atypical symptoms is critical to survival as well as limiting damage to the heart muscle. "I shudder to think what the outcome might have been had I not made the decision to go to LMH that day," Cynthia said. "Mine was a very unusual coincidence, blessed

Heart Care - How do we compare?

At Licking Memorial Health Systems (LMHS), we take pride in the care we provide. To monitor the quality of that care, we track specific quality measures and compare them to benchmark measures. Then, we publish them so you can draw your own conclusions regarding your healthcare choices.

The first step in heart attack treatment is to confirm that the patient is truly experiencing the symptoms of an attack.

An electrocardiogram (EKG) measures the electrical activity of the heart and can determine if a heart attack is occurring.

	LMH 2014	LMH 2015	LMH 2016	National Average(1)
Median time from arrival to completion of EKG	1.0 minute	3.0 minutes	1.0 minute	7.0 minutes

In patients having a heart attack, emergency angioplasty restores blood flow to the heart muscle by re-opening blocked or clogged arteries. This is completed by inserting a catheter into the artery that feeds the heart, inflating a balloon and placing a stent inside the artery to keep it open. This procedure can help reduce damage to the heart muscle, and has the best results when performed within 90 minutes after arriving in the Emergency Department (ED). Licking Memorial Hospital (LMH) began performing this procedure in 2008.

Mean time from arrival until balloon angioplasty performed	LMH 2014	LMH 2015	LMH 2016	National Goal ⁽²⁾
	54 minutes	61 minutes	55 minutes	90 minutes
Time to balloon within 90 minutes	LMH 2014	LMH 2015	LMH 2016	LMH Goal
	100%	100%	100%	95% ⁽¹⁾

Emergency Medical Services (EMS) are often the first to evaluate and treat patients experiencing heart attack symptoms. EMS acquires a baseline EKG to wirelessly transmit to the LMH ED physician for interpretation and early identification, so that the Catheterization Lab team can be alerted quickly. Medical contact to reperfusion refers to the time it takes in minutes from the first medical contact by EMS with a patient experiencing heart attack symptoms, to the opening of the artery to allow blood flow back to the heart muscle.

	LMH 2014	LMH 2015	LMH 2016	National Goal ⁽³⁾
Medical contact to reperfusion	74 minutes	77 minutes	75 minutes	Less than 90 minutes

Licking Memorial Health Professionals (LMHP) physicians also monitor the usage of antiplatelet drugs, such as aspirin or an antithrombotic drug, in patients with coronary artery disease (CAD). The usage of these medications lowers the risk of myocardial infarction (MI) or death in patients with CAD.

	LMHP 2014	LMHP 2015	LMHP 2016	LMHP Goal ⁽⁴⁾
LMHP CAD patients with aspirin	92%	92%	93%	Greater than 85%
and/or antithrombotic prescribed				

5. LMHP physicians monitor the cholesterol levels, specifically the LDL (bad cholesterol) levels of their patients with diagnoses of CAD. Elevated LDL cholesterol level is a risk factor for MI, but is reversible through medication, diet and exercise.

	LMHP 2014	LMHP 2015	LMHP 2016	LMHP Goal ⁽⁴⁾
LMHP CAD patients with LDL less than or equal to 100 mg/dl	68%	65%	64%	Greater than 50%

Data Footnotes: (1) Hospitalcompare.hhs.gov national benchmarks. (2) American College of Cardiology National Cardiovascular Data Registry – Cath PCI Registry. (3) American Heart Association - Recommendation for Criteria for STEMI Systems of Care, 10/4/2016. (4) Benchmark indicates LMHP Goal.



by good fortune, and I am forever grateful to Licking Memorial Hospital for providing the life-saving care that I needed when I arrived unannounced at the ED. I realize that under normal circumstances, it is a better idea to call 911 and be transported to the hospital. Emergency Medical Services can alert physicians in advance, perform an EKG in transit, and offer life-saving interventions as needed, even before you reach the hospital."

Under Dr. Rajjoub's leadership, the Cardiac Catheterization Lab team was recognized with the prestigious Licking Memorial Health Systems President's Award in 2015. Also that year, the Cardiology Department received the National Cardiovascular Data Registry Platinum Performance Achievement Award and currently holds the American Heart Association Mission: Lifeline Gold Level Recognition.

Health Tips – Call 911 if Heart Attack Symptoms Occur

A heart attack is a life-and-death emergency, and treatments available are most effective when administered relatively quickly. By calling 9-1-1, emergency medical services (EMS) providers can begin evaluating, monitoring and treating the patient immediately upon arrival and transport a patient to the hospital in the shortest amount of time. EMS technicians are equipped with knowledge and life-saving equipment in case the patient's heart stops beating while being transported to the hospital.

Some heart attacks are sudden and immediate, leaving no doubt of what has happened; however, some heart attacks start slowly, with mild pain or discomfort. Often people affected are unsure of what is wrong and wait too long before getting help. Common symptoms of a heart attack are:

- Chest pain or pressure that lasts for more than a few minutes
- Pain in other areas of the upper body including the arms, neck, jaw, or stomach
- Shortness of breath
- Sweating
- Nausea
- Light-headedness

As with men, women's most common heart attack symptom is chest pain or discomfort, but women, the elderly, patients with diabetes and patients who have undergone open heart surgery are somewhat more likely than men to experience some of the other atypical symptoms, particularly shortness of breath, nausea/vomiting and back or jaw pain.



Please take a few minutes to read this month's report on **Heart Care.** You'll soon discover why Licking Memorial Hospital is measurably different ... for your health!

The Quality Report Card is a publication of the LMHS Public Relations Department. Please contact the Public Relations Department at (220) 564-1572 to receive future mailings.

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