**Alpha Blockers** — A group of drugs used to lower blood pressure.

**Aneurysm** — An abnormal widening or ballooning-out of the wall of an artery, a vein or the heart due to weakening of the wall by disease, injury or an abnormality present at birth. Some common locations for aneurysms include the aorta (the major artery leading away from the heart), brain (cerebral aneurysm), leg, intestine and splenic artery.

**Angioplasty** — A medical procedure in which a balloon is used to open narrowed or blocked blood vessels of the heart (coronary arteries). A catheter with a deflated balloon on its tip is passed into the narrowed artery segment, the balloon is inflated and the narrowed segment widened. Then the balloon is deflated and the catheter is removed.

**Antiarrhythmic Medication** — A group of drugs that helps control and slow heart rate. The type of arrhythmia you have determines which medication will be prescribed.

**Anticoagulant (Blood Thinners)** — A group of drugs that decrease the ability of the blood to clot, or coagulate. They are sometimes called blood thinners, although they do not actually thin the blood.

**Antihypertensive Drugs** — A group of drugs commonly prescribed to help lower blood pressure when appropriate diet and regular physical activity alone have not succeeded. They include diuretics, angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blocker (ARBs), vasodilators, alpha-blockers, beta-blockers, calcium channel blockers and central alpha-agonists. Many patients with high blood pressure may require more than one drug to achieve control. Some of these drugs may also be prescribed for heart failure and arrhythmia patients.

**Antiplatelet Agents** — A group of drugs used to keep blood clots from forming by preventing blood platelets from sticking together.

**Aorta** — The large artery that receives blood from the heart’s left ventricle and distributes it to the body.

**Aortic Valve** — The heart valve between the left ventricle and the aorta. It has three flaps (cusps).

**Arrhythmia (Dysrhythmia)** — An abnormal heartrhythm caused by a disruption of the normal functioning of the heart’s electrical conduction system.

**Arteriography** — A testing procedure in which a dye visible to X-rays is injected into the bloodstream. Then X-ray pictures are taken and studied to see if the arteries are damaged, narrowed or blocked. Arteriography is done during cardiac catheterization. (Also known as Angiocardiography, Angiogram and Angiography.)

**Arterioles** — Small, muscular branches of arteries. When they contract, they increase resistance to blood flow, and blood pressure in the arteries increases.
**Arteriosclerosis** — Commonly called hardening of the arteries, this includes a variety of conditions that cause artery walls to thicken and lose elasticity. Arteriosclerosis can occur because of fatty deposits on the inner lining of arteries (atherosclerosis), calcification of the wall of the arteries, or thickening of the muscular wall of the arteries from chronically elevated blood pressure. It also is associated with aging. Atherosclerosis is a form of arteriosclerosis.

**Artery** — One of a series of vessels that carry oxygenated blood from the heart to the various parts of the body. Their thick elastic walls expand as blood flows through the arteries.

**Artificial Heart** — A prosthetic device that is implanted into the body to replace the original biological heart.

**Atrial Fibrillation** — A disorder of heart rate and rhythm in which the heart's two small, upper chambers (atria) quiver rapidly and empty blood into the heart's lower chambers (ventricles) in a disorganized manner instead of beating effectively. Blood that isn't pumped completely out of the atria when the heart beats may pool and clot.

**Atrial Flutter** — Very rapid beating of the heart's upper chambers (atria). This rhythm occurs most often in people with heart diseases such as pericarditis, coronary artery disease and cardiomyopathy.

**Beta-Blockers (Beta-Adrenergic Blocking Agents)** — A class of drugs that slow the heartbeat, lessen the force with which the heart muscle contracts and reduce blood vessel contraction in the heart, brain and throughout the body.

**Blood Clot** — A jelly-like mass of blood tissue formed by clotting (coagulating) factors in the blood.

**Blood Pressure** — The force or pressure exerted by the heart against the walls of the arteries. When the arterioles (smaller arteries) constrict (narrow), the blood must flow through a smaller “pipe” and the pressure rises. High blood pressure can result, adding to the workload of the heart and arteries. Optimal blood pressure is less than 120/80 mm Hg. High blood pressure, or hypertension, is a condition in which blood pressure levels are above the normal range. Blood pressures of 120–139 / 80–89 mm Hg are considered prehypertension. Blood pressure is considered high if it is 140/90 mm Hg or higher. High blood pressure increases the risk for heart attack, angina, stroke, kidney failure and peripheral artery disease (PAD). High blood pressure may also increase the risk of developing fatty deposit in arteries (atherosclerosis). The risk of heart failure also increases due to the increased workload that high blood pressure places on the heart.

**Blood Vessels** — Hollow tubes that carry blood from the heart and lungs to every cell in the body and back to the heart and lungs. These tubes are flexible and respond to circumstances and hormonal changes in the body by dilating, (becoming larger) or constricting (becoming smaller). Arteries are blood vessels that carry blood from the heart. Veins are blood vessels that carry blood back to the heart.

**Blood Vessel Dilators (Vasodilators)** — Drugs that cause the blood vessels (especially the arterioles) to expand by relaxing their muscular walls. This lowers blood pressure and reduces the heart's workload. ACE inhibitors and nitroglycerine are examples of vasodilators.

**Bradycardia** — Slowness of the heart rate (less than 60 beats per minute). Bradycardia can be present in otherwise normal individuals and is common in well-trained athletes and in most
persons during deep sleep. It can also be related to heart metabolic abnormalities and heart disease. If it presents no symptoms, it usually doesn’t require treatment. However, with symptoms such as fainting (syncope), chest pain (angina), heart failure and high blood pressure, it should be treated.

**Bypass Surgery** — (See *Coronary Artery Bypass Graft*)

**C-Reactive Protein (CRP) Test** — Blood test that measures the concentration of C-reactive protein (CRP), a plasma protein known as acute phase protein, that rises in the blood with inflammation from certain conditions. Since inflammation is believed to play a role in the development of coronary artery disease (atherosclerosis), a highly sensitive assay (hs-CRP) test may be added to the screening battery of cholesterol and other lipid tests to help detect people at risk for a heart attack.

**Calcium Channel Blockers (Calcium Antagonists)** — A class of drugs that blocks the movement of calcium into the heart and blood vessel muscle cells. This causes the muscles to relax, lowering blood pressure, slowing the heart rate and decreasing oxygen demands of the heart. These medications lower blood pressure in patients with hypertension, but have little effect on normal blood pressure. Since they decrease the heart’s pumping strength, slow the heart rate and relax blood vessels, they are also used to treat other heart conditions, such as chest pain (angina) and abnormal heart rhythms (arrhythmias).

**Capillaries** — Microscopically small blood vessels between arteries and veins that distribute oxygenated blood to the body’s tissues.

**Cardiac** — Pertaining to the heart.

**Cardiac Arrest** — Cardiac arrest is the sudden, abrupt loss of heart function. It’s also called sudden cardiac arrest or unexpected cardiac arrest. Most cardiac arrests occur when the electrical impulses in the diseased heart become rapid (ventricular tachycardia) or chaotic (ventricular fibrillation) or both. This irregular heart rhythm (arrhythmia) causes the heart to suddenly stop beating. Cardiac arrest can be reversed if it's treated within a few minutes with cardiopulmonary resuscitation (CPR) and an electric shock (defibrillation) to the heart to restore a normal heartbeat. Sudden cardiac death (SCD) occurs within minutes after symptoms appear unless cardiac arrest is reversed. The term "massive heart attack" is often wrongly used in the media to describe sudden death from cardiac arrest. The term "heart attack" refers to death of heart muscle tissue due to the loss of blood supply, not necessarily resulting in a cardiac arrest or the death of the heart attack victim. A heart attack may cause cardiac arrest and sudden cardiac death, but the terms aren’t synonymous. (See *Sudden Cardiac Death*)

**Cardiac Catheterization** — The process of examining the heart by guiding a thin tube (catheter) into a vein or artery and passing it into the heart and into the coronary arteries. Coronary Arteriography (angiography) and angioplasty (PTCA, Balloon Angioplasty) are done during a cardiac catheterization.

**Cardiac Computed Tomography (CT Scan), Computerized Axial Tomographic Scan (CAT scan)** — An X-ray imaging technique that uses a computer to produce tomographic, or cross-sectional, images of the chest (including the heart and great vessels) or the brain. It’s used to diagnosis and evaluate heart diseases such as aortic diseases, cardiac masses and pericardial disease and to define the areas in the brain affected by stroke.
**Cardiac Enzymes** — Enzymes in the body that are sometimes called heart damage markers because they are released into the bloodstream when heart muscle cells are damaged. There has been an increased emphasis on developing blood tests that detect injury in the heart muscle as early as possible. These blood tests can confirm or refute suspicions raised early in the evaluation of heart disease, especially in the emergency setting.

**Cardiac Positron Emission Tomography (PET)** — A non-invasive nuclear imaging technique that uses tomographic (cross-sectional) images and radioactive tracers to study and quantify how the heart tissue works. Cardiac PET scans are used to diagnose coronary artery disease (CAD) and can be used to identify injured but viable (living) myocardium (heart muscle).

**Cardiac (Cardiovascular) Rehabilitation** — Cardiovascular rehabilitation is a medically supervised program to help heart patients recover quickly and improve their overall physical and mental functioning. The goal is to reduce the risk of another cardiac event or to keep an existing heart condition from getting worse. Cardiac rehabilitation programs allow patients to have medically supervised counseling, exercise, vocational guidance and assistance with making the lifestyle changes necessary for a healthy heart. Research has shown that patients who participate in rehabilitation programs have a higher survival rate and a better quality of life.

**Cardiac Resynchronization (Biventricular Pacing)** — A treatment for heart failure that uses a three-lead biventricular pacemaker implanted in the chest. The pacemaker sends tiny electrical impulses to the heart muscle to coordinate (resynchronize) the pumping of the chambers of the heart, improving the heart’s pumping efficiency. Both ventricles are paced to contract at the same time. This can reduce the symptoms of heart failure.

**Cardiologist** — A doctor who diagnoses and treats heart problems.

**Cardiology** — The study of the heart and its functions in health and disease.

**Cardiomyopathy (Myocarditis)** — A serious disease affecting the heart. It involves an inflammation and reduced function in heart muscle. There are multiple causes including viral infections. In cardiomyopathy, the heart muscle becomes inflamed and weakened, causing symptoms of heart failure, which can mimic a heart attack. Cardiomyopathy can be classified as primary or secondary. Primary cardiomyopathy can't be attributed to a specific cause, such as high blood pressure, heart valve disease, artery diseases or congenital heart defects. Secondary cardiomyopathy is due to specific causes. It's often associated with diseases involving other organs as well as the heart. There are three main types of cardiomyopathy — dilated, hypertrophic and restrictive. Treatment includes evaluation and treating the underlying cause.

**Cardiomyoplasty** — An investigational procedure in which skeletal muscles are taken from a patient's back or abdomen and wrapped around an ailing heart. This added muscle, aided by ongoing stimulation from a device similar to a pacemaker, may boost the heart's pumping motion. This procedure is experimental, and is performed in limited numbers. Recent research suggests that it may not be as effective as originally hoped.

**Cardiopulmonary Bypass (Heart/Lung Machine)** — A procedure to circulate and oxygenate the blood while surgery is performed on the heart. It involves diverting blood from the heart and lungs through a heart/lung machine and the return of oxygenated blood to the aorta.

**Cardiopulmonary Resuscitation (CPR)** — An emergency lifesaving procedure that is performed when a person’s own breathing or heartbeat have stopped. It uses a combination of
chest compressions and mouth-to-mouth breathing (rescue breathing). The chest compressions keep oxygenated blood circulating and the breathing provides oxygen to the lungs until an effective heartbeat and breathing can be restored or the patient can be put on advanced cardiac life support.

**Cardiovascular** — Pertaining to the heart and blood vessels. (“Cardio” means heart; “vascular” means blood vessels.) The circulatory system of the heart and blood vessels is the cardiovascular system.

**Cardioversion** — Delivering an electrical shock to a person’s heart to rapidly restore an abnormal heart rhythm (arrhythmia) back to normal. External cardioversion is performed with a defibrillator, either in an emergency situation or as a scheduled treatment for arrhythmia. Internal cardioversion is delivered by a device similar to a pacemaker, called an implantable cardioverter defibrillator (ICD). ICDs are used to treat arrhythmias in the lower heart chamber (ventricle) such as ventricular tachyarrhythmia or fibrillation. These arrhythmias can cause sudden cardiac death (SCD) because of the dangerously fast heart rate. Internal cardioversion is also used to treat arrhythmias of the upper heart chamber (atrium) in some cases. The device used in this case is called an atrial defibrillator.

**Carotid Artery** — One type of major artery in the neck carrying blood from the heart to the brain. The other type is vertebral artery.

**Carotid Artery Disease (Carotid Artery Stenosis)** — A carotid artery narrowed by a buildup of plaque. Carotid artery disease, a type of atherosclerosis, is a major risk factor for ischemic stroke.

**Carotid Artery Stent** — The carotid artery is a major artery in the neck that carries blood to the brain. Carotid angioplasty is used to open a narrowed artery to allow more blood to flow through to help prevent stroke. Stents are used to prop an artery open after angioplasty. A stent is a wire mesh tube that is collapsed into a small diameter, put over a balloon catheter and moved into the area of blockage. When the balloon is inflated, the stent expands and locks in place, holding the artery open. The stent stays in the artery permanently to prop it open and improve blood flow.

**Carotid Phonoangiography** — A test using a sensitive microphone placed on the neck, very close to the carotid artery. It records sounds and detects blockages, such as those caused by carotid artery disease.

**Catheterization** — (See Cardiac Catheterization)

**Central Agonists (Central Alpha-Agonists)** — Drugs that lower heart rate and reduce blood pressure. They work by preventing the brain from sending signals to the nervous system to speed up the heart rate and narrow the blood vessels. As a result, the heart doesn’t pump as hard and blood flows more easily through blood vessels.

**Cerebral** — Pertaining to the brain.

**Cerebral Angiography** — A procedure used most frequently to confirm cases of stroke, tumor, bulging of the artery walls (aneurysm), a clot or narrowing of the arteries and to evaluate the arteries of the head and neck before surgery. It is used to get more exact information after something abnormal, such as bleeding within the brain, has been detected by an MRI or CT scan of the head. The arteries are not normally seen in an X-ray, so a contrast dye is injected
into one or more arteries to make them visible. For the cerebral angiography, the dye is injected into one or both of the carotid, or vertebral, arteries in the neck (leading to the brain). (Also known as carotid angiography, vertebral angiogram and head angiography.)

**Cerebral Aneurysm (Brain Aneurysm)** — A brain aneurysm is a ballooning-out of the wall of an artery in the brain. Often this wall is weakened by disease, injury or an abnormality present at birth. Aneurysms are often caused or made worse by high blood pressure. They aren't always life-threatening, but serious consequences, such as stroke, can result if one bursts in the brain. This is called a hemorrhagic (or bleeding) stroke. When a blood vessel on the brain's surface ruptures and bleeds into the space between the brain and the skull (but not into the brain itself), it's called a subarachnoid hemorrhage. When an artery in the brain bursts, flooding the surrounding tissue with blood, it's called a cerebral hemorrhage.

**Cerebral Embolism** — An embolism occurs when foreign material, such as a broken-off piece of plaque or a blood clot travels through the bloodstream and becomes lodged in a blood vessel blocking the flow of blood. When an embolism blocks the flow of blood to the brain, it is called a cerebral embolism. A type of stroke.

**Cerebral Hemorrhage** — Bleeding within the brain, resulting from a ruptured aneurysm or a head injury. It results in a hemorrhagic stroke.

**Cerebral Thrombosis** — Formation of a blood clot inside a blood vessel or artery that supplies part of the brain, blocking the flow of blood. A type of stroke.

**Cerebrovascular** — Pertaining to the brain and its major blood vessels.

**Cerebrovascular Accident (CVA)** — The medical term for a stroke (apoplexy). Strokes can be either ischemic (loss of blood supply) or hemorrhagic (bleeding into the brain). (See Stroke)

**Cholesterol** — A soft, waxy substance found among the lipids (fats) in the bloodstream and in all the body’s cells. It's an important part of a healthy body because it's used to form cell membranes, some hormones and is needed for other functions. Cholesterol and other fats can't dissolve in the blood. They have to be transported to and from the cells by special carriers called lipoproteins. There are several kinds, but the most important are low-density lipoprotein (LDL or “bad”) and high-density lipoprotein (HDL or “good”). (See LDL Cholesterol and HDL Cholesterol)

**Cholesterol-Lowering Drugs** — Cholesterol-lowering drugs reduce LDL (“bad”) cholesterol, increase HDL (“good”) cholesterol and reduce triglycerides (a blood fat). Several classes of drugs are used to treat cholesterol including statins. People may be prescribed a “combination” therapy of drugs depending on their specific situations. Cholesterol-lowering drugs have been proven to reduce risks for heart disease. Due to potential side effects, patients who are taking most cholesterol-lowering drugs may need to have periodic liver function tests.

**Chronic Illness** — An illness or condition that develops slowly and persists for a long time. Heart failure is almost always a chronic illness.

**Cineangiography** — The technique of taking moving pictures to show how a dye visible by X-ray passes through blood vessels.

**Circulatory System** — Pertaining to the heart, blood vessels and the blood’s circulation.
Closed-Heart Surgery — An operation on the heart (or more typically the great vessels) without the need for cardiopulmonary bypass. Examples of closed-heart surgery include repairs of coarctation of the aorta and patent ductus arteriosus.

Congenital Heart Disease (CHD) — A broad term for a number of different abnormalities present at birth (congenital) affecting the heart. Though present at birth, the effects of these abnormalities may not be obvious immediately. In some cases, the defects may not be evident for years, may never cause any problems and are compatible with normal physical activity and a normal life span. Congenital heart disease is responsible for more deaths in the first year of life than any other birth defects. Many of these defects need to be followed carefully. Though some heal over time, others will require treatment. Congenital heart disease is often divided into two types: those with cyanosis (blue discoloration caused by a relative lack of oxygen) and those without cyanosis.

Congestive Heart Failure (Heart Failure) — An older term for heart failure. Because not all patients with heart failure have problems with excess fluid, such as in the lungs or extremities, the term "heart failure" is preferred over "congestive heart failure." Heart failure is the inability of the heart to pump out all the blood that returns to it. This results in blood backing up in the veins that lead to the heart and sometimes in fluid accumulating in various parts of the body. (See Heart Failure)

Coronary Arteries — Two arteries arising from the aorta that arch down over the top of the heart, branch and provide blood to the heart muscle.

Coronary Artery Disease (CAD) — Conditions that cause narrowing of the coronary arteries, reducing blood flow to the heart muscle. A type of atherosclerosis. Severe cases can result in heart attack.

Coronary Artery Bypass Graft (Bypass Surgery) — Surgery that reroutes (bypasses) blood around clogged coronary arteries and improves the supply of blood and oxygen to the heart muscle. It's sometimes called open-heart surgery or CABG (for coronary artery bypass graft) or "cabbage."

Coronary Heart Disease (CHD) — Disease of the heart caused by atherosclerotic narrowing of the coronary arteries likely to produce chest pain (angina pectoris) or heart attack.

Coronary Occlusion (or Coronary Thrombosis) — An obstruction of a coronary artery that hinders blood flow to some part of the heart muscle. A cause of heart attack.

Defibrillation — The use of an electrical device (defibrillator) to give an electric shock to the heart to help restore a normal heartbeat. It is used for dangerous arrhythmias, such as ventricular tachycardia or ventricular fibrillation, and in cardiac arrest.

Defibrillator — A device that delivers "pacing" or an electric shock to the heart when an abnormal rhythm (arrhythmia) is detected. A defibrillator may be external or internal. External defibrillators use pads that are placed on the chest to deliver the electric shock. Internal defibrillators (implantable cardioverter defibrillators or ICDs) look similar to a pacemaker, but they continuously monitor the heart rhythm to detect overly rapid arrhythmias such as ventricular tachycardia or ventricular fibrillation. The ICD corrects the heart rhythm by delivering precisely calibrated and timed electrical shocks to restore a normal heartbeat when one of these dangerous arrhythmias has occurred.
**Diastolic Blood Pressure** — The lowest blood pressure measured in the arteries that occurs when the heart muscle relaxes between beats. In a typical blood pressure reading, such as 120/78, the lower number is diastolic blood pressure. It is measured in millimeters of mercury (mmHg).

**Digital Cardiac Angiography (DCA), Digital Subtraction Angiography (DSA)** — A modified form of computer imaging that records pictures of the major blood vessels to the heart or brain. It shows blockages, how severe they are and what can be done about them.

**Digitalis (also Digoxin, Digitoxin)** — A drug that strengthens the contraction of the heart muscle and slows the heart rate. It's often used to treat congestive heart failure and is also used to treat certain heart rhythm abnormalities (arrhythmias).

**Diuretic (or Water Pill)** — A drug that increases the rate at which urine forms by promoting the excretion of water and salts. This helps to relieve the heart's workload and also decreases the buildup of fluid in the lungs and other parts of the body, such as the ankles and legs. Different diuretics remove fluid at varied rates and through different methods. They are used to treat high blood pressure, congestive heart failure and some congenital heart defects.

**Doppler Ultrasound** — A test that uses high-frequency sound waves to detect blockages in an artery and to evaluate blood flow.

**Echocardiography (or Echocardiogram)** — A diagnostic method in which a hand-held device is placed on the chest and high-frequency sound waves (ultrasound) are used to produce images of the heart’s size, structure and motion. An “echo” provides valuable information about the health of the heart and helps gather information about abnormal rhythms (arrhythmias).

**Edema** — Swelling due to an abnormally large amount of fluid in the intracellular body tissue spaces. Edema is common in the legs, ankles and lungs of people with heart failure.

**Electrocardiogram (or Electrocardiography, ECG or EKG)** — A quick, painless test that records the electrical activity of the heart. It may be taken at rest or during exercise. It is the standard clinical tool for diagnosing arrhythmias (abnormal rhythms) and to check if the heart is getting enough blood or if areas of the heart are abnormally thick. Small patches called electrodes are placed on different parts of the body. Different tracings of the heart's electrical activity can be made and permanently recorded on paper or in a computer. Three major waves of electric signals appear on the ECG. Each one shows a different part of the heartbeat. The P wave records the electrical activity of the atria. The QRS wave records the electrical activity of the ventricles, and the T wave records the heart's return to the resting state. Doctors study the shape and size of the waves, the time between waves and the rate and regularity of beating. This tells a lot about the heart and its rhythm.

**Exercise Stress Test (Treadmill Test)** — A diagnostic test in which a person walks on a treadmill or pedals a stationary bicycle while hooked up to equipment that monitors the heart. The test monitors heart rate, breathing, blood pressure, electrical activity (on an electrocardiogram) and the person’s level of tiredness. It shows if the heart’s blood supply is sufficient and if the heart rhythm is normal. (Also known as Exercise Test, Exercise Cardiac Stress Test or ECST.)

**Fibrillation** — Fast, uncoordinated contractions of individual heart muscle fibers. The heart chamber involved can’t contract all at once and pumps blood ineffectively, if at all.
HDL Cholesterol (High-Density Lipoprotein Cholesterol) — Often called “good” cholesterol because a high level of it seems to protect against heart attack and other cardiovascular conditions. People with a low HDL cholesterol level (less than 40 mg/dL in men, less than 50 mg/dL in women) have a higher risk of heart disease. A low level of HDL cholesterol also may raise stroke risk.

Heart Attack (Myocardial Infarction) — Death of or damage to part of the heart muscle due to an insufficient blood supply. Heart attacks occur when one of the coronary arteries that supply blood to the heart muscle is blocked. Blockage is usually caused from a buildup of plaque (deposits of fat-like substances) due to atherosclerosis. If a plaque deposit tears or ruptures, a blood clot may form and block the artery, causing a heart attack. Heart attack is also called a coronary thrombosis or coronary occlusion.

Heart Murmur — An abnormal sound in the heart caused by defective heart valves or holes in the heart walls. The sound is made by blood circulating through the heart's chambers and valves, or through blood vessels near the heart. A person can be born with a heart murmur or it can be caused by pregnancy, fever, thyrotoxicosis (a condition resulting from an overactive thyroid gland) or anemia.

Heart Rate — The heart contracts (beats) as the electrical impulse moves through it. This normally occurs 60 to 100 times a minute. The heart's upper chambers (atria) contract a split-second before the lower chambers (ventricles). This lets the atria empty their blood into the ventricles before the ventricles contract.

Heart Transplant — Surgery that replaces a damaged heart with a healthy heart taken from a donor who has been declared brain dead.

Heart Valve — There are four valves in the heart. The valves control the direction of blood flow through the heart by opening and closing with each heartbeat. The valves permit the blood to flow in only one direction. The four valves are: tricuspid valve (between the right atrium and the right ventricle); pulmonary valve (between the right ventricle and the pulmonary artery; mitral valve (between the left atrium and the left ventricle) and aortic valve (between the left ventricle and the aorta).

Hypertension — Medical term for high blood pressure. (See High Blood Pressure.)

LDL Cholesterol (Low-Density Lipoprotein) — Often called “bad” cholesterol, LDL cholesterol is the major cholesterol carrier in the blood. If too much LDL cholesterol circulates in the blood, it can slowly build up in the walls of the arteries that lead to the heart and brain. Together with other substances it can form plaque, a thick, hard deposit that can clog those arteries. This condition is known as atherosclerosis. A high level of LDL cholesterol (160 mg/dL and above) reflects an increased risk of heart disease. An optimal level is less than 100 mg/dL. Levels from 100–129 mg/dL are near or optimal. Levels from 130–159 mg/dL are borderline high, which also increases risk for heart disease or stroke. LDL cholesterol level may be a better indicator of risk for a heart attack or stroke than total cholesterol, and drug therapy is initiated based on the level of LDL cholesterol. The lower the LDL cholesterol, the lower the risk for heart disease or stroke. For people with heart disease, the LDL cholesterol should be less than 100 mg/dL. For those with severe heart disease, the doctor may suggest that the LDL cholesterol level be less than 70 mg/dL.

Lipid — A fatty substance insoluble in blood. Cholesterol, cholesterol compounds, and triglycerides are all lipids. They are transported in the blood as part of large molecules called lipoproteins. Abnormalities in lipids can contribute to heart disease. It is recommended that all
adults age 20 or older have a fasting lipoprotein profile (total cholesterol, LDL cholesterol, HDL cholesterol and triglyceride) done every 5 years. People at higher risk for cardiovascular disease (CVD) or who are on cholesterol-lowering medication will need to have their cholesterol checked more often

**Low-Density Lipoprotein (LDL)** — A type of protein that transports “bad” cholesterol in the blood. It’s the major cholesterol carrier in the blood. (See LDL Cholesterol.)

**Mitral Valve** — The valve located between the heart’s left upper chamber (atrium) and left lower chamber (ventricle). It has two flaps (cusps) that open and close, similar to a double door.

**Myocardium** — The muscular center layer of the heart between the outer layer (epicardium) and the inner layer (endocardium). The myocardium is responsible for the heart’s pumping action and contracts to pump blood out of the heart and then relaxes as the heart refills with returning blood. The myocardium is the layer that has the largest oxygen needs and is most affected by decreased blood flow (ischemia).

**Nitroglycerin** — A drug (a vasodilator) that relaxes (dilates) blood vessels and increases the supply of blood and oxygen to the heart while reducing its workload. “Nitro” is used to treat acute chest pain (angina), in which case it is prescribed as quick-dissolving pills to be placed under the tongue when needed. It can also be prescribed as a routine medication, in which case it is available as slower-release pills, creams or patches. When the blood vessels dilate, blood flow to the tissues increases. This can relieve chest pain.

**Pacemaker** — The “natural” pacemaker of the heart is called the sinus node. It’s a small group of specialized cells in the top of the heart’s right chamber (atrium). It produces the electrical impulses that travel down to the heart’s lower chambers (ventricles), causing the heart to contract. An “artificial pacemaker” is an electrical device that can substitute for a defective natural pacemaker or conduction pathway. An artificial pacemaker regulates the speed and rhythm of the heartbeat. Usually these devices are used for hearts that beat too slowly. Pacemakers run on batteries and usually last many years.

**Palpitations** — The sensation of the heart beating rapidly or irregularly.

**Pulmonary Edema** — Fluid buildup (edema) in the lungs usually due to mitral stenosis or left ventricular failure. Symptoms of pulmonary edema include difficulty breathing, coughing up blood, excessive sweating, anxiety and pale skin.

**Thrombosis** — The formation or presence of a blood clot (thrombus) inside a blood vessel or chamber of the heart.