

Patient Handbook

Open Heart Surgery



Your doctor recommends heart surgery, thanks for choosing Owensboro Health for your procedure. You'll benefit from board-certified cardiac surgeons, minimally invasive options and advanced technology that will improve your outcome.

Your heart is in good hands.



Open Heart Surgery



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Thank you for choosing
**OWENSBORO
HEALTH**



THANK YOU FOR CHOOSING OWENSBORO HEALTH

Our team is dedicated to providing patients with the highest quality of care. When it comes to your heart health, you deserve the best caregivers. We have a team of providers who provide the highest level of heart care.

We are dedicated to providing comprehensive heart care to you and your family. Our team includes board-certified, fellowship-trained physicians who specialize in:

- CARDIOTHORACIC SURGERY
- GENERAL CARDIOLOGY
- INTERVENTIONAL CARDIOLOGY
- NUCLEAR CARDIOLOGY
- ELECTROPHYSIOLOGY
- ADVANCED HEART FAILURE
- ENDOVASCULAR SURGERY

With the patient experience in mind, we have formed a team you can trust. We will provide you and your loved ones with the best care possible. Your heart is in good hands.

ABOUT YOUR STAY

Our private rooms have a sleeper chair, so a support person may spend the night with you. We also offer wireless internet access, direct phone access to our nurses and we are a tobacco-free campus.

Main Number	270-417-2000
Pre-Admission Clinic	270-417-6950
Owensboro Health Medical Group Cardiology	270-417-7500
Owensboro Health Medical Group Cardiothoracic Surgery	270-417-7510
Outpatient Cardiac Rehab	270-688-4824
Third floor Progressive Care	270-417-3300
Second floor Critical Care	270-417-2200
Second floor Surgery Waiting	270-417-3127
Hospitality Suites	270-417-7450



HOSPITALITY SUITES

If you'd like to stay overnight while visiting a patient at Owensboro Health Regional Hospital, ask about our comfortable, affordable hospitality suites. You'll appreciate the convenience of remaining in the hospital, and your loved one will feel better knowing you are close by.

Nightly Rates: Single Suites \$25 / Double Suites \$35. Call 270-417-3120 to check availability.

YOUR HEART TEAM MEMBERS



WE HAVE A TEAM OF SURGICAL AND MEDICAL DOCTORS, NURSES AND OTHER EXPERTS WHO WILL WORK WITH YOU. SOME OF THE EXPERTS WHO WILL BE PART OF YOUR CARE TEAM ARE:

SURGEON:

This is the doctor that you have chosen to do your cardiothoracic surgery. Your surgeon or another designated provider will see you daily while you are in the hospital. The surgeon directs your surgical care.

CARDIOLOGIST:

This is the doctor who is certified to treat problems of the cardiovascular system, which involves the heart, arteries and veins. The cardiologist may work together with your heart surgeon if called for in your care plan.

CRITICAL CARE-INTENSIVIST/ PULMONOLOGIST:

This doctor has special training and experience in treating patients who need intensive care. The critical care specialist may work with your heart doctor and/or heart surgeon based on your care plan.

HOSPITALIST:

This is a medical doctor who specializes in the needs and care of patients staying in the hospital. Your surgeon may have this doctor follow you while in the hospital. Hospitalists help care for your medical needs while you are in the hospital and are available 24/7 to address any concerns.

REGISTERED NURSE (RN):

Much of your care will be provided by registered nurses. Nurses are responsible for your daily medical needs. Your nurse will carry out all orders given by your surgeon. This includes giving medications and tracking your vital signs. They will also complete your physical assessment and keep your medical record accurate.

PHYSICIAN ASSISTANT (PA):

PAs work with your surgeon, and the other members of your healthcare team. The PA helps with your care during your hospital stay and discharge planning.

ADVANCED REGISTERED NURSE PRACTITIONER (APRN):

Advanced practice registered nurses, (commonly known as nurse practitioners), work with your heart surgeon and the other members of your healthcare team. Nurse practitioners help take care of you during your hospital stay and discharge planning.

CERTIFIED NURSING ASSISTANT (CNA):

The Certified Nursing Assistant helps you with daily tasks. They will help with bathing, dressing and getting to the bathroom. The CNA will also take your vital signs and report to the nurse.

PHYSICAL THERAPIST (PT):

Your Physical Therapist will teach you how to move the right way and use special equipment. They will help measure your mobility and give you resources to ensure your needs are met when you return home.

OCCUPATIONAL THERAPIST (OT) :

An Occupational Therapist will teach you how to do daily tasks more simply. They will teach you how to work with special equipment. This equipment includes grabbers, shower benches or raised toilet seats, if needed.

CASE MANAGER (CM):

Case Managers help you and your family with any needs you may have when you return home. They also work with other team members to plan your discharge. They are a great help planning for community and homebound care if you should need that type of help.

HOW THE HEART WORKS

THE HEART IS DIVIDED INTO MUSCLE, CHAMBERS, VALVES AND ARTERIES.

MUSCLE

Your heart is a muscle that pumps blood throughout your body. Each time your heart beats, it is pumping blood. To do work, your heart needs a constant flow of oxygen-rich blood, which comes from the lungs. The heart pumps the oxygen-rich blood throughout the body. This gives nutrients and oxygen needed for your body to work.

CHAMBERS

The heart muscle is divided into four compartments or chambers. There are two on the left side and two on the right side. The upper chamber on each side is called an atrium. The atrium receives and collects blood. The lower chamber on each side is called a ventricle. The ventricles pump blood. The right ventricle pumps blood only to the lungs. The left ventricle is the main pumping chamber of the heart. It pumps blood to all parts of the body except the lungs.

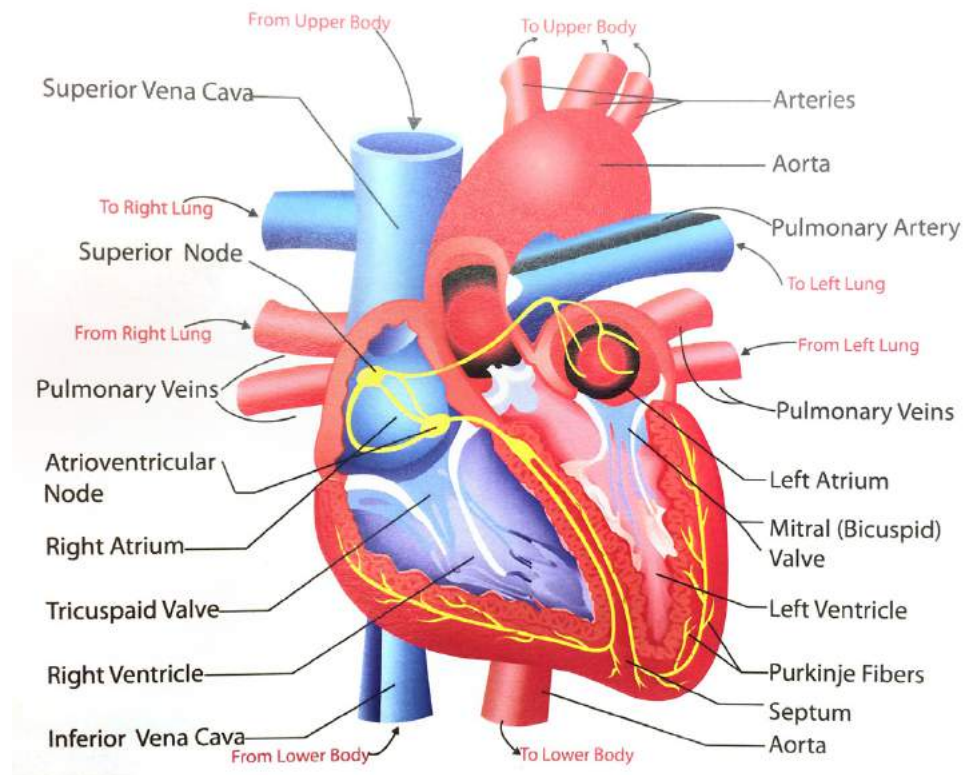
VALVES

There are four valves that control the flow of blood inside the heart. These valves are the one-way doors that keep the blood moving in only one direction. When a healthy heart beats, the valves close to keep the blood from flowing backward.

CORONARY ARTERIES

Coronary arteries are the blood vessels that wrap around the heart muscle. They keep it supplied with oxygen-rich blood. When blood is pumped from the left ventricle, it is forced into the body's main artery. The main artery is also called the aorta and runs through the center of the abdomen and chest and connects to the heart at the top through the left atrium. Two coronary arteries, the left main artery and the right coronary artery, branch off the aorta. The left main artery is about as wide as a drinking straw and less than an inch long. It branches into two narrower arteries.

The left anterior descending artery travels down the front side of the heart. The left circumflex artery circles around the left side and then to the back of the heart. These arteries are on the outside surface of the heart. They divide into smaller vessels, like tree branches, and lead deep into the heart muscle. This carries oxygen-rich blood to the heart's cells.



DISEASES OF THE HEART



THERE ARE MANY TYPES OF HEART AND BLOOD-VESSEL DISEASES. COMMON TYPES ARE:

CORONARY ARTERY DISEASE/HARDENING OF THE ARTERIES

Coronary artery disease or hardening of the arteries occurs when the inner walls of the arteries become narrow and lose flexibility. This is due to build-up of plaque in the arteries, called atherosclerosis (ATH-ro-skleh-RO-sis). The coronary arteries feed oxygen-rich blood to the heart. The signs and warnings of coronary artery disease are listed below under “Heart Attack.”

HEART ATTACK

Heart attacks happen when a coronary artery in your heart becomes blocked. One more term for this is Myocardial Infarction (often abbreviated “MI”). When the blood flow is closed fully, the heart muscle will start to die. This can result in temporary loss of heart function or permanent damage to the heart itself, leading to heart failure. If left untreated, heart attacks are usually deadly.

WARNING SIGNS AND SIGNALS OF A HEART ATTACK. SEEK MEDICAL ATTENTION IF YOU HAVE ONE OR MORE OF THESE SYMPTOMS:

- Uncomfortable or painful pressure, in the center of the chest that lasts more than a few minutes. This pressure or sensation may go away and come back. This sensation may become worse while exerting yourself or during physical activity.
- Fullness, squeezing or pain in the center of the chest that lasts more than a few minutes. This feeling goes away and comes back. This sensation may become worse while exerting yourself or during physical activity.
- Pain that radiates or spreads to the shoulders, neck, arms back or jaw.
- Chest discomfort with light-headedness, fainting, sweating or nausea
- Difficulty breathing or shortness of breathe

LESS COMMON WARNING SIGNS OF A HEART ATTACK:

- Pain in other areas such as stomach or abdominal pain
- Nausea or dizziness (without chest pain)
- Shortness of breath and trouble breathing (without chest pain)
- Unexplained anxiety, weakness or fatigue
- Palpitations, cold sweat or paleness
- Coughing, belching or heartburn-like sensation

Many times these signs and warnings are ignored or thought to be some other health problem. Diabetics often have symptoms that are not typical or have no chest pain at all. If you have any of these symptoms, please seek emergency medical attention right away.

HEART FAILURE

Heart failure does not mean the heart has stopped beating. The term “failure” means that the heart muscle has become weakened and is unable to pump blood effectively. The symptoms of this heart condition are:

- Shortness of breath (hard to breathe)
- Waking up out of breath
- Trouble breathing when lying down or going to sleep
- Feeling tired or lack of strength
- Swelling in the feet and ankles
- Chest pain
- Coughing
- Confused or impaired thinking
- Palpitations in your heart
- Decreased hunger or swelling in the belly
- Fainting, dizziness or light-headedness

DISEASES OF THE HEART

HYPERTENSION/HIGH BLOOD PRESSURE

Hypertension or high blood pressure is when your blood pressure is often above the normal range. The danger of high blood pressure is that for some people there are no signs or warnings. You should see your doctor regularly to have your blood pressure checked.

Uncontrolled high blood pressure is harmful. It will add to your risk of stroke, heart attack, heart failure, kidney failure and eye problems. High blood pressure can lead to these problems:

- Harm to your arteries. This can result in hardening and thickening of the arteries (arteriosclerosis). There may be fat in the artery lining (atherosclerosis) or an enlarged bulging blood vessel (aneurysm).
- Thickening of the heart's pumping chamber (left ventricular hypertrophy). The heart muscle thickens to pump blood against the high pressure in the vessels. More blood is needed to do this, but narrowed blood vessels cannot supply that blood.
- At the same time the heart may have trouble pumping enough blood to meet the body's need. This causes fluid to build up in the lungs or in the feet and legs. This is called congestive heart failure.
- A blocked or ruptured blood vessel in your brain. This is called a stroke.
- Weakened and narrowed blood vessels in your kidneys, which can cause the kidneys to fail.
- Thickening, narrowed or torn blood vessels in the eyes, this can result in a loss of eyesight.

VALVE DISEASE

Valve disease occurs when your heart valves do not open or close correctly. The heart is made up of four chambers. There are two upper chambers, the right atrium and left atrium. The two lower chambers are the left and right ventricles. They are responsible for pumping the blood. The heart valves between the atrium and ventricle on each side are like one-way doors. They open and close with each heartbeat. This controls the blood flow from one chamber to the next. There are four valves of the heart: Mitral valve, aortic valve, tricuspid valve and pulmonic valve.

MITRAL VALVE - the mitral valve is found between the left atrium and the left ventricle. It is the one valve with two flaps (or cusps).

TRICUSPID VALVE - the tricuspid valve is found on the right side of the heart. It is between the right atrium and right ventricle. It is made up of three flaps (cusps), each a different size.

AORTIC VALVE - the aortic valve is found on the left side of the heart. It opens to allow blood to leave the heart from the left ventricle into the aorta. The aorta is the main artery of the body. It closes to stop blood from flowing back into the left ventricle.

PULMONARY VALVE - the pulmonary valve is found on the right side of the heart. It is between the right ventricle and pulmonary artery. It lets blood leave the heart and enter the lungs through the pulmonary artery. It closes to stop blood from flowing back into the right ventricle.

Problems with heart valves may happen as a result of infection, birth defects, or over time due to wear and other medical problems. Treatment involves medical care or even surgery to replace or fix the valve.



PREPARING FOR OPEN HEART SURGERY



REMEMBER, THIS IS ONLY A GUIDE. YOUR DOCTORS, NURSES OR THERAPISTS MAY ADD TO OR CHANGE SOME OF THE RECOMMENDATIONS. ALWAYS TAKE THEIR RECOMMENDATIONS FIRST! DON'T BE AFRAID TO ASK QUESTIONS IF YOU ARE UNSURE OF ANY INFORMATION. WE ARE ALWAYS GLAD TO HELP EXPLAIN INFORMATION SO YOU FEEL COMFORTABLE. WE RECOMMEND THAT YOU KEEP YOUR HANDBOOK AS A RESOURCE FOR AT LEAST THE FIRST YEAR AFTER YOUR HOSPITAL STAY.

TESTS

Lab and radiology tests may be needed to help the healthcare team with planning your surgery. These may be blood tests, a urine test, a chest x-ray, an electrocardiogram (EKG) or other tests. Your surgeon will decide which tests are needed for you.

MEDICATIONS

It is vital to give your surgeon and primary care doctor a list of ALL of the medications you are taking. This includes any vitamins, herbal medications and over-the-counter medications. They will tell you which medications to stop taking and which to take before your test.

Your surgeon will ask you to stop the use of any ibuprofen, or blood thinners – such as Coumadin (a brand name for warfarin) Plavix (a brand name for clopidogrel) and/or any similar drugs – one to two weeks before surgery. These products tend to add to bleeding risks during and after surgery. Check the labels on any medications you plan to take. If you have questions about any medications, please check with your surgeon.

SMOKING

Quitting tobacco products (including cigarettes, cigars, snuff, chewing tobacco or vaping) is one of the best things you can do for our heart health and overall well-being. Tobacco use often leads to a higher rate of problems after surgery, including poor wound healing, infection and poor outcomes. You must stop smoking at least 12 hours before your surgery.

If you would like help with quitting tobacco, ask your surgeon, cardiologist or primary care provider. You can also visit OwensboroHealth.org and search “smoking cessation” for more resources and help.

ALCOHOL

Do not drink any alcohol at least 24 hours before your surgery.

DENTAL WORK

Stop all dental work and have all teeth and gum problems treated at least 14 days before your surgery. If you don't, germs in the mouth could enter the bloodstream, causing an infection in your new valve. After heart surgery, always tell your dentist that you have an artificial valve. You will need to take antibiotics before dental or medical tests. You will need to do this for the rest of your life.

WHAT TO BRING TO THE HOSPITAL



IF YOU CHOOSE TO BRING PERSONAL ITEMS SUCH AS CELL PHONES, TABLETS OR LAPTOPS, PLEASE BE ADVISED THAT WE CANNOT BE HELD RESPONSIBLE FOR THESE POSSESSIONS.

DO BRING:

- Bring all your medications in their containers
- Insurance card and money for insurance co-pay
- Photo ID
- Eyeglasses, with case
- Hearing aids, with case
- Dentures
- Comfortable shoes for walking
- Two or three loose-fitting outfits
- If you have sleep apnea, please bring your CPAP machine with you
- If you have an advance directive (living will, power of attorney, etc.), please bring it with you the morning of surgery

DO NOT BRING:

- Valuables
- Jewelry
- Floor length or step-in robe
- High-heeled or open back shoes
- Do not wear make-up or nail polish

THE NIGHT BEFORE SURGERY

BEFORE BATHING

You will be given a prescription for mupirocin that should be started one (1) day before and the morning of surgery. This ointment is a safety measure to help stop infections. This may be used while you are in the hospital. Please follow the instructions given.

Take a shower or bathe the night before and morning of surgery. You will be asked to use a special soap before coming to the hospital.

WHAT TO EAT OR DRINK BEFORE SURGERY

Your stomach must be empty before surgery. For your safety, you should NOT eat or drink (not even water) after midnight the night before your surgery. Your doctor may tell you to take some medications the morning of surgery. If so, take the medications with a sip of water.

DAY OF SURGERY

ADMISSIONS

The day of your surgery you should come to the hospital two hours before your scheduled time. You will then check in at the Surgery area check-in located on second floor. Most often you will be registered within 15 minutes after you arrive. During the registration session, your insurance and personal information will be verified.

You will be given information on patient rights, privacy and living wills. You will also be asked to pay any insurance co-pay or deductible at that time. Call your insurance company before the day of surgery about your out-of-pocket costs. Bring a photo ID and your insurance card.

HOLDING

Once you are admitted to the hospital, you will be escorted into the holding area. Here you will change in to your hospital gown. An IV will be started that will be used for fluid, medications and anesthesia.

Before going in to surgery, you will be asked to remove any dentures, hearing aids, and glasses. These items should be left with a family member for safe-keeping.

ANESTHESIA

While in the holding area, you will be seen by a member of the anesthesia team. They will talk about the anesthesia choices and decide on the best anesthesia technique for you. They will answer any questions you may have. You will be asked to sign consent for anesthesia before your procedure.

THE PROCEDURE

An expertly trained group of doctors, PAs, techs and nurses work as a team to do your surgery. Most operations take about four to six hours, but this varies based on the type of operation.

FOLLOWING SURGERY



CVICU

When you wake up from surgery, you will be in the Critical Care Unit. This unit is busy and can be loud with noises from the monitors. Please try and stay calm during this time. You will be cared for and watched very closely. The Critical Care team is expertly trained to care for you in this critical time. You may feel cold, so there will be a warm blanket ready and waiting for you. Boots or legwraps will be squeezing your legs to help blood clots from developing. These boots or legwraps will stay on until you are up and walking around.

RESPIRATORY

A breathing tube will be taped to the side of your mouth. The tube may be uncomfortable. It may make you feel as though you are gagging or have to cough. You will not be able to talk. The breathing tube will be attached to a ventilator that breathes for you during and right after surgery. It is very vital to stay calm and let the machine breathe for you. Your heart team will help you to communicate without talking. Your family and friends may be there to help you communicate as well. They should expect you to look pale and puffy, which is normal.

TUBE REMOVAL

The breathing tube will stay in place until you are awake and alert enough to breath on your own. This may take four to five hours after coming out of the OR. You may not eat or drink while the breathing tube is in your throat. Your heart team will use moist swabs for your mouth to help with dryness.

After the breathing tube is removed, you will be given a device called an incentive spirometer. This device helps you practice deep breathing to fill your lungs and help prevent pneumonia. You should use the incentive spirometer 10 times each hour while you are awake.

DRAINS

Chest tubes are put in to drain extra fluid around your heart during surgery. The tubes will often be removed one to three days after surgery. They are attached to a container and you may feel some tugging under your skin. The chest tubes are often a source of discomfort but this can be relieved with medications. It is vital that you tell your heart team when you feel pain so your pain can be managed. A urinary catheter tube will also be placed, and this is removed within a day or two after surgery. If you have pacemaker wires, these will be removed before you are discharged.

VISITATION/WAITING AREA

When you are settled in your room, the nurse will tell your loved ones that they can see you. We ask that you limit the number of family and friends that visit in Critical Care. Your body needs time to rest and rebuild strength. Having surgery is hard and you may fall asleep while your guests are with you.

PREVENTING BLOOD CLOTS

All patients who have undergone heart surgery are at a greater risk of having blood clots. Blood clots are also known as deep vein thrombosis or DVT. To lessen the risk, it is vital that three interventional methods are used:

1. Mechanicals: These are knee-high stretchy stockings and/or pneumatic squeezing devices. They may be placed on your legs to help with blood flow.
2. Medications: You may get a shot or take a pill to help stop blood clots from forming. This will be decided by your doctor.
3. Early mobility: One of the most vital things to stop blood clots is to safely get up and move. Your heart team will decide when it is safe for you to be up and moving.

MANAGING PAIN

It is important to know that some pain is normal and expected after having a heart surgery. However, we will do everything possible to manage and control your pain as much as possible. There are many options to help manage your pain. You may get pain medications through your IV or by mouth. There are also some ways to lower pain without medications, including progressive relaxation techniques, listening to music or using cold packs.

Your health care team will work with you to decide the safest and most helpful way to handle your pain.



MEDICATION SIDE EFFECTS

The most common side effects linked to narcotics – a medication type commonly used for pain – include: decreased respirations/breathing, drowsiness, nausea, vomiting, dizziness, constipation, rash, itching, dry mouth, and decreased appetite. It is very important that you tell your nurse if you notice any of these side effects.

DISCHARGE

YOUR NURSE OR DOCTOR WILL GIVE YOU DISCHARGE INFORMATION ON YOUR SPECIFIC PROCEDURE.

Most often, heart surgery patients will go home four to six days after surgery. You will work with your healthcare team to decide the safest and best time to be released from the hospital, which will depend on how well you are healing. Most of the time, patients are ready to go straight home after hospital discharge, but, this will depend on your situation. Sometimes, it is best for patients to be transferred to a rehab center or extended care facility.

DISCHARGE INSTRUCTIONS:

- Take medications as prescribed by your doctor (be sure to ask about how best to take and store your medications)
- Stick to a low-salt, cardiac diet
- Stop using tobacco products (including cigarettes, cigars, chewing tobacco and vaping)

DISCHARGE INSTRUCTIONS FOR PROCEDURE PATIENTS:

- No heavy lifting greater than 5-10 pounds for 48 hours
- No driving for 3-4 weeks or until released by your surgeon
- If you have a cough, please hold pressure to the incision site using your heart pillow as taught by the staff

- Check for cold feet, numbness or tingling of your hands, fingers, feet or toes. If this happens, go to the nearest ER.
- Please take ALL of your medications as instructed by your doctor. - This is very important to your recovery.
- Weigh yourself every day in the morning after using the bathroom. Your discharge weight was: _____
- Get up and get dressed every day. Do NOT stay in bed.
- Set a daily routine.
- When you are tired, rest.
- No driving until you return to the doctor's office. You may ride in a car.
- Please let your doctor know if you need to travel before your first follow-up visit.
- Do not lift more than 5-10 pounds during the first week you are at home.
- You may walk up and down the stairs.
- Walk as much as you are able.
- Cough, breathe deeply and use your incentive spirometer 10 times each hour when you are awake.

FOR PATIENTS WHO HAVE HAD VALVE SURGERY:

- Before any dental work or surgery is done, it is vital for you to tell your dentist or surgeon that you have had valve surgery.
- We recommend the cardiac diet for all patients.

DISCHARGE

INCISION CARE/SUTURES/STAPLES

- Skin glue and absorbable stitches that don't need to be removed are often used on incisions.
- A dry gauze dressing should be placed on the wound daily until it is fully dry.
- Please do not use any ointments or antibiotic creams (e.g., Neosporin) on the incision if skin glue is used. These products can melt the glue.
- Shower each day. Do not take tub baths for the first week you are at home, as this can lead to infection
- Cleanse wounds with mild soap and water. Keep wounds dry.
- A small amount of bloody or clear drainage is normal.
- Watch for signs of infection, including redness, wound site that is warm to the touch, or fever greater than 101 degrees. Infection can also cause swelling or discolored draining at the incision site.

MANAGING PAIN AT HOME

- Use your medications only as directed. If your pain is not helped or gets worse, call your surgeon's office.
- As your healing progresses and you have less pain, try increasing the time between your pain medications doses.
- Pain medications need time to work. Most pain pills take 30 minutes to start working.
- Time your medications so that you take it before starting an event such as dressing or workout.
- Pain medications are best taken with food. They can cause nausea if taken without food.
- Drink plenty of fluids and eat two or more servings of fiber, fruits and veggies to help ease constipation. Your doctor may also prescribe a stool softener while you are on these medications.

FOLLOW-UP

It is vital to keep your follow up appointments with your doctor. They will record your progress and answer any questions.



AVOIDING POTENTIAL ISSUES AFTER SURGERY

PREVENTING BLOOD CLOTS

Follow your surgeon's orders with care. This will help to cut the risk of blood clots forming during the first weeks after surgery.

Your surgeon may suggest that you keep taking your blood-thinning medications you began taking while in the hospital. For your safety, it is very important that you take this medication as directed.

GO AT ONCE TO THE NEAREST ER IF YOU HAVE ANY OF THESE WARNING SIGNS - THEY COULD MEAN A BLOOD CLOT IN THE LUNGS (PULMONARY EMBOLISM), WHICH COULD PROVE FATAL:

Warning signs a blood clot has traveled to your lungs (pulmonary embolism):

- **Sudden shortness of breath**
- **Sudden start of chest pain**
- **Chest pain when coughing**

AVOIDING INFECTION

Your surgeon will give you orders on how to care for your incision at home. Bacteria that enter the bloodstream can lodge around your new valve and cause infection. Some common causes of infection after valve replacement surgery are urinary tract infections or skin infections. Infection also comes from bacteria that enter the blood during dental exams or procedures. It is vital to tell your dentist or any doctor doing a surgical procedure that you have an artificial valve. They will take the needed precautions.

- Keep your wound dry until healed over, often two weeks. It is vital that you do not put the incision in water, as with a tub bath. Your surgeon will tell you when it is safe to do so.
- Taking a shower (with gentle running water) is allowed two to three days after hospital discharge. This is allowed as long as you keep the surgical area dry and there is no drainage for 48 hours. If fluid is draining out, that means bacteria can still leak in. It is vital to keep the incision site clean and dry until there is no leakage.
- Do not put any lotions, creams, or powders on your incision.



CALL YOUR DOCTOR RIGHT AWAY IF YOU HAVE ANY OF THESE WARNING SIGNS:

WARNING SIGNS OF BLOOD CLOTS IN YOUR LEG:

- **Increasing pain in your lower leg**
- **Feels tender or any redness above or below your knee**
- **Increasing swelling in your calf, ankle or foot**

HOME CARE

Once you are home, walking will be your main exercise. Walking helps with blood flow and heart function and expands your lungs. Walking also helps you get your body back to normal by toning up your muscles.

How far did you walk in the hospital? Let this distance be a guide for starting your walking at home. You should walk three to four times daily and add to your distance a little each day. As you add to your distance, cut back on the number of walks per day.

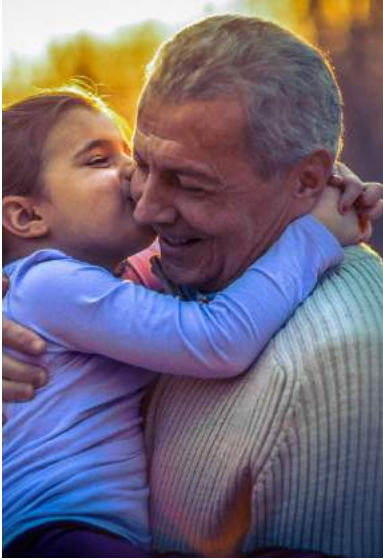
Try to make the walking a fun pastime by walking with your family or friends. Take care not to walk outdoors when the weather is very cold or hot. A good plan is to walk in a mall or other exercise-related facility where the climate is controlled. Walk where there are plenty of benches on which to rest.

Some light activities you could do around the house are :

- Dusting
- Washing dishes
- Hand-washing clothes

It is also vital that you keep on using your incentive spirometer three to four times a day. Also be sure to do the deep breathing and coughing exercises you did while in the hospital.

AVOIDING POTENTIAL ISSUES AFTER SURGERY



You may resume sexual relations in about a month or any time after that when you feel comfortable. As with any activity, there should be no undue pressure on the breastbone or chest, and nothing that causes incision pain, shortness of breath, lack of strength or faintness. Your doctor will give you instructions about any activity limits, but as a rule for about two months after surgery, you may not lift things heavier than 5-10 pounds. During this time, you should also avoid pushing and pulling or activities that put pressure on your breastbone or strain on any of your incisions.

ACTIVITY GUIDELINES & PRECAUTIONS

The sternum or breastbone may have been cut during surgery and will take 12 weeks or more to heal. You must follow all orders as prescribed by your care team. A physical therapist will give you exercises that will help lessen stiffness due to inactivity.

These precautions will make sure that the breastbone is properly in line and heals the right way:

- Do NOT raise both of your arms over your head at the same time.
- Do NOT reach behind your back with both hands at the same time.
- Do NOT lift more than five to 10 pounds.
- Do NOT push, pull or lift heavy objects.
- Avoid pulling yourself out of bed by the bedrails.
- Avoid pushing yourself up from the armrests of a chair.
- Avoid closing car doors.

Use a “splinting” technique over your chest when you cough, sneeze or laugh. Do this by hugging a pillow gently on your chest or placing your hands over your breastbone. Do this each time you cough, sneeze or laugh. The splinting technique will give support to your incision and lower pain.

CALL YOUR SURGEON IF YOU HAVE:

- Any signs of infection, such as redness, swelling, warmth or drainage at the incision site
- A fever or chills
- Fainting, dizziness or light-headedness
- Sudden numbness or lack of strength of an extremity
- Loss of ability to speak, walk or see
- Difficulty breathing (shortness of breath)
- Any other unusual signs or symptoms
- Weight gain of 2 pounds in one day or 3 or more pounds over three or four days with growing swelling in the ankles, feet or legs
- Increased fatigue
- Change in your heartbeat, or sharp palpitations
- Chest pain (angina) or symptoms similar to those you may have had prior to your surgery

CARDIAC REHAB

Cardiac rehabilitation is a specially designed outpatient program for heart patients. While in rehab, a patient's heart activity is checked during exercise. The program helps build physical strength and endurance through exercise. This program combines physical exercise with risk factor changes to help with healing and make your body strong.

WHAT HAPPENS IN A CARDIAC REHABILITATION PROGRAM?

- An exercise program is designed for you using a treadmill, bike, arm bike and weight machines.
- Non-stop EKG monitoring throughout each exercise session.
- The patient's blood pressure, heart rate and oxygen levels are also checked.
- The cardiac rehab team will help you understand your heart condition and help find ways to reduce the risk of future heart problems. Learning opportunities include: Home exercise, nutrition, and medication. The program also covers stress management, weight loss and quitting tobacco. Patients learn about heart anatomy, cholesterol and blood pressure.
- All activity is supervised by an exercise physiologist, a respiratory therapist and a registered nurse.

WHO BENEFITS FROM CARDIAC REHAB?

People benefit from heart rehab if they have been diagnosed with:

- Stable angina
- Recent heart event (heart attack with in the past 12 months)
- Coronary Artery Bypass Graft (CABG)
- Valve replacement surgery
- Angioplasty (with or without stent placement)



BENEFITS OF CARDIAC REHABILITATION

- Speeds up healing after open heart surgery or other heart procedures
- Helps quality of life
- Helps healthy changes in lifestyle habits
- Helps cardiovascular fitness
- Helps reduce and manage personal risk factors linked to heart disease
- Improves activities of daily living
- Manages and lowers stress through exercise
- Provides social opportunities with people experiencing similar issues, which can help with anxiety and overall mental health

A doctor referral is needed for cardiac rehabilitation. Our staff can help you in making an appointment. Most health insurance plans, including Medicare, cover cardiac rehabilitation. A co-payment may be needed for each exercise session.

The cardiac rehabilitation staff can answer any of your questions after you go home. They will help you set up your rehabilitation program. You may reach Owensboro Health Heart & Lung Rehab at 270-688-4824.

DIET

To make heart-healthy changes in your diet, it helps to know some basic facts about nutrition. If your waist measures more than 35 inches for women, or more than 40 inches for men, you are at a greater risk for heart disease.

WEIGHT MAINTENANCE

To maintain your weight, you must eat the right amount of calories. You will need to eat enough calories to keep up your energy level, but not more than you need. If you take in more calories than you burn, you gain weight. If you take in less calories than you burn, you lose weight. If you balance the two, you maintain weight. The number of calories you need depends mainly on your age, gender and your activity level. Check with your doctor or a registered dietitian for your daily caloric needs.

CHOLESTEROL

Cholesterol from food is a fat-like substance of animal origin. Foods such as egg yolks, meat, poultry, fish, milk and milk products are rich in cholesterol. Since most people eat food that has cholesterol, it is vital to avoid large amounts. There are two types of cholesterol: Low-density lipoprotein (LDL), and high-density lipoprotein (HDL). Ideally, you want to keep your LDL low and your HDL high.

FATS

Most people tend to get far too much fat in their diets. This leads to health problems such as obesity, high cholesterol, and heart disease. Some easy ways to cut fat in your diet are:

- Eating more whole grains, veggies, fruits, and beans
- Replacing fatty desserts and snacks with fresh fruits or non-fat yogurt
- Trimming all fat from meats
- Restricting animal foods to special occasions or getting rid of them all together. Use other sources of protein, such as beans.
- Change to non-fat or low-fat dairy products
- Avoid partially hydrogenated oils or trans fat (look at the ingredients list)



THE AMERICAN HEART ASSOCIATION DIETARY GUIDELINES ARE AS FOLLOWS:

- Fats, oils and sweets: use sparingly
- Milk, yogurt, cheese: 2-3 servings a day (a serving is the same to 1 cup of milk or yogurt, 1 ½ ounces of natural cheese or 2 ounces of processed cheese)
- Meat, poultry, fish, dry beans, eggs or nuts: 2-3 servings a day (a serving is the same to 2- 3 ounces of cooked lean meat, poultry, or fish, or ½ cup of cooked dry beans)
- Vegetables: 3-5 servings per day (a serving is 1 cup of raw, leafy veggies; ½ cup of other veggies, cooked or raw, or ¾ cup of veggie juice)
- Fruits: 2-4 servings per day (a serving is 1 medium apple, banana, orange, and ½ cup of chopped, cooked or canned fruit, or ¾ cup of fruit juice)
- Bread, cereals, rice, pasta: 6- 11 servings a day (a serving is 1 slice of bread, ½ bagel or hamburger bun, 1 ounce of ready-to-eat cereal, ½ cup of cooked cereal, rice or pasta)

READING FOOD LABELS

Nutrition Facts	
Serving Size 1 large apple (242g/8 oz.)	
Amount Per Serving	
Calories 130	Calories from Fat 0
	% Daily Value**
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Potassium 260mg	7%
Total Carbohydrate 34g	11%
Dietary Fiber 5g	20%
Sugars 25g	
Protein 1g	
Vitamin A 2%	• Vitamin C 8%
Calcium 2%	• Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories per gram:	
Fat 9	• Carbohydrate 4 • Protein 4

Try to get in the habit of reading food labels for the caloric, fat and cholesterol levels.

First, let's look at the serving size. The label clearly marks the serving size. You may be surprised to see that you have been eating larger portions and did not realize it. Try to stick to the recommended serving size. If you feel you need more, just keep track of the calories and fat content for your records.

Next, let's see how many calories come from fat. Your daily total calories from fat should not be more than 30 percent of your caloric intake.

For example, if a food you choose has 200 calories per serving, and 100 of them come from fat, that means that 50% of the caloric intake is from fat. To find the percentage of calories from fat, divide the total number of calories from fat into the total number of calories. In this case, 100 divided by 200 gives us .5, or 50%.

The label lists the ingredients from the most used to the least used. So if the label starts with oils, butters, and sugars it is most likely going to be very high in calories and fat.

The percentages listed on the side of the food label are based on a 2,000-calorie per day diet. The government, based on current recommendations, sets these values. Here is an example: Based on a 2000-calorie per day diet, you need 300g of carbohydrates per day. If the label reads "Carbohydrate 13g" that means that the food equals 4 % of your daily allowance.

You still have 96 % of the recommended carbohydrate intake left to eat. In the beginning, reading food labels makes shopping a bit more time-consuming, but as you get more comfortable reading labels, it will become automatic.

QUITTING THE SMOKING HABIT



WHY SHOULD I QUIT SMOKING?

Smoking cigarettes tops the list of major risk factors of our number one killer – heart and blood vessel disease. In fact, almost one-fifth of deaths from heart disease are from smoking. The long list of diseases and deaths due to smoking is frightening. Smoking also harms thousands of nonsmokers who are exposed to cigarette smoke. It causes infections, disease and death in infants and children.

If you smoke, you have good reason to worry about its effect on your health and the health of your loved ones and others. You could become one of the more than 400,000 deaths smoking causes every year. When you quit, you reduce that risk tremendously.

No one says that quitting cigarettes is easy. But everyone says it's worth it. Quitting will drastically reduce your risk of heart and blood vessel diseases – diseases that kill someone every 34 seconds. It will also lower your chance of lung disease and cancer. Most of all, quitting can save your life and the lives of nonsmokers around you.

WHAT FOLLOWS YOUR FINAL CIGARETTE:

20 MINUTES

- Your blood pressure returns to its usual level
- Your pulse rate slows to normal
- Your circulation improves enough to warm your hands and feet to normal temperature

4 HOURS

- Half the carbon monoxide from your last cigarette has left your bloodstream

8 HOURS

- The carbon monoxide from your last cigarette is now gone from your bloodstream
- Your blood now carries a normal amount of oxygen

24 HOURS

- Your risk of heart attack is lower

48 HOURS

- Damaged nerve endings start to regrow
- Your sense of smell and taste have improved

2 WEEKS TO 3 MONTHS

- Your circulation is better
- Walking is easier for you
- Lung function increases up to 30 percent

1 TO 9 MONTHS

- You cough less
- Your sinuses are clearer
- You have more energy
- You don't become short of breath as easily

1 YEAR

- Your heart-attack risk has fallen halfway between that of a current smoker and that of someone who has never smoked

5 YEARS

- Your risk of heart attack and stroke approaches that of a non-smoker

10 TO 15 YEARS

- Your risk of dying from any cause is almost the same as that of someone who never smoked

HOW CAN I QUIT SMOKING? HOW DO I QUIT?

STEP 1

- List reasons to quit and read them daily.
- Wrap your cigarette pack with paper and rubber bands and when you smoke, write down the time of day, how you feel, and how important that cigarette is to you (on a scale of 1-5).
- Rewrap the pack.

STEP 2

- Keep reading your list of reasons and add to it if you can.
- Don't carry matches and keep your cigarettes a bit out of reach.
- Each day, try to smoke fewer cigarettes, trying not to smoke the ones that aren't most important.

STEP 3

- Continue with Step 2
- Don't buy a new pack until you finish the one you're smoking.
- Change brands twice during the week, each time for a brand lower in tar and nicotine.
- Try to stop for 48 hours at one time.

STEP 4

- Quit smoking completely.
- Increase your physical activity.
- Avoid situations you relate with smoking.
- Find a healthy substitute for smoking.
- Do deep breathing exercises when you get the urge.



IS IT TOO LATE TO QUIT?

No matter how much or how long you've smoked, when you quit, your risk of heart disease goes down. Three years after quitting, your risk of heart disease is almost the same as if you'd never smoked.

WHAT HAPPENS AFTER I QUIT?

- Sense of smell and taste come back
- Smoker's cough goes away
- Will digest more normally
- Feel alive and full of energy
- Breathe much easier
- Easier to climb stairs
- Feel free from the mess, smell and burns in clothing
- Feel free of "needing" cigarettes
- Live longer and have less chance of heart disease, lung disease and cancer

What if I smoke after quitting? It's hard to stay a nonsmoker once you've had a cigarette, so try everything you can do to avoid that "one." The urge to smoke will pass. The first 2 to 5 minutes will be the toughest. If you do smoke after quitting:

- This doesn't mean you're a smoker again – do something now to get back on track.
- Don't punish yourself – you're still a nonsmoker.
- Think about why you smoked and decide what to do the next time it comes up.
- Sign a contract to stay a nonsmoker.

FREEDOM FROM SMOKING®

The American Lung Association's Freedom From Smoking® program is for individuals who are ready to quit smoking now. Because most people know that smoking is dangerous to their health, the program focuses almost exclusively on how to quit, not why to quit. If you're still wondering if you are truly ready to quit smoking, find out about Owensboro Health's Freedom From Smoking program. Call 270-688-3291 for more information.

HOW DOES FREEDOM FROM SMOKING® WORK?

The Freedom From Smoking® uses techniques based on pharmacological and psychological principles and methods designed to help smokers gain control over their behavior. Because no single quit smoking technique is effective for all smokers, the program includes a comprehensive variety of evidence-based cessation techniques. The curriculum also includes the latest research about nicotine replacement therapy (gum, inhalers, patches, lozenges and nasal spray) and other smoking cessation medications such as bupropion (also known under the brand name "Zyban®") and varenicline (sold under the brand name "Chantix®").

WHY USE FREEDOM FROM SMOKING®

Since it was first introduced over 35 years ago, the American Lung Association's Freedom From Smoking® program has helped hundreds of thousands of Americans end their addiction to nicotine and begin new smoke-free lives. Ranked the most effective smoking cessation program in a study by Fordham University Graduate School of Business, Freedom From Smoking® is based on proven addiction and behavior change models. The program offers a structured, systematic approach to quitting, and its positive messaging emphasizes the benefits of better health.

EVALUATION STUDIES HAVE SHOWN THAT INDIVIDUALS WHO PARTICIPATE IN FREEDOM FROM SMOKING®:

- EXPERIENCE IMMEDIATE HEALTH BENEFITS.
- LEARN TO ADDRESS THE PHYSICAL, MENTAL AND SOCIAL ASPECTS OF THEIR ADDICTION.
- ARE SIX TIMES MORE LIKELY TO BE SMOKE-FREE ONE YEAR LATER THAN THOSE WHO QUIT ON THEIR OWN.
- WHEN USED IN COMBINATION WITH SMOKING CESSATION MEDICATION, UP TO 60 PERCENT OF PARTICIPANTS REPORT HAVING QUIT SMOKING BY THE END OF THE PROGRAM.

Join us at the Healthpark for both the information sessions and classes. Call 270-688-3291 to register now. Classes start regularly.

Open Heart Surgery





Owensboro Health's heart team has a strong reputation for clinical excellence, advanced technology and care that always puts you first.

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