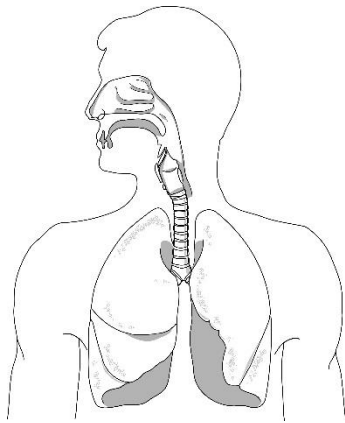


## Lung Surgery - At UW Health

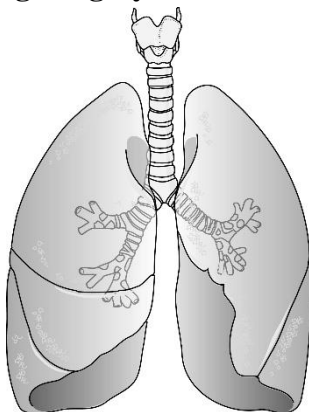
This handout will teach you what to expect before, during, and after lung surgery. It will help you plan for your time in the hospital and at home after your lung surgery. If you have questions, please call the **Surgery Clinic (608)-263-7502**. For questions about having surgery, refer to the **First Day Surgery Booklet**.

### Your Lungs

This picture shows normal lungs. Your right lung has 3 lobes and left lung has 2 lobes. Your doctor may use one of these pictures to describe your lungs and explain what may happen during surgery.



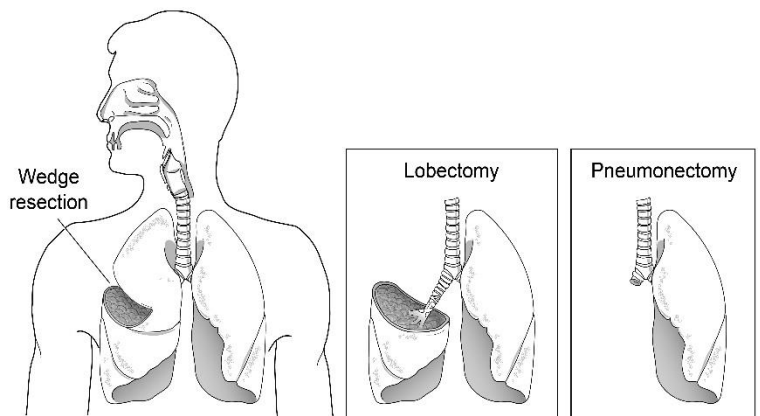
### Lung Surgery



There are 3 main types of lung surgery. You may expect to have one type, but have another type done. This is because your surgeon talks with you before seeing your lungs in the operating room (OR). In the OR, your surgeon may decide that one of the other types of lung surgery is best for you.

### Four Main Types of Lung Surgery

- **Wedge resection:** A small part (wedge) of the lung is removed.
- **Segmentectomy:** a larger section of a lobe is removed.
- **Lobectomy:** A whole lobe of the lung is removed.
- **Pneumonectomy:** The whole lung is removed.

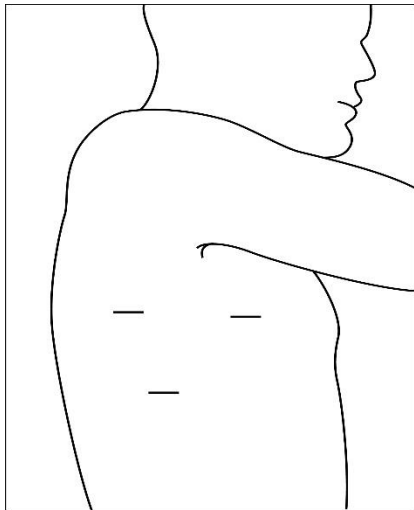


There are 2 types of incisions for lung surgery. Often, you will only have one type, but in some cases, you may need both.

## Types of Incisions

### What is a thoracoscopy?

Thoracoscopy, also known as VATS (Video Assisted Thoracoscopic Surgery), is done with a tiny camera that is put into the chest. 3 small incisions (each about the size of the width of a finger) are made in the chest wall. This allows the surgeon to look around the chest. The surgeon can then diagnose and treat problems. VATS can be used to repair a collapsed lung, remove a section of lung, take tissue samples, or drain fluid from around the lung. If cancer is found, the doctor may need to do a thoracotomy after the VATS while you are still in the OR. This would be done if the tumor or part of the lung that needs to be removed is too big for the small VATS incision.



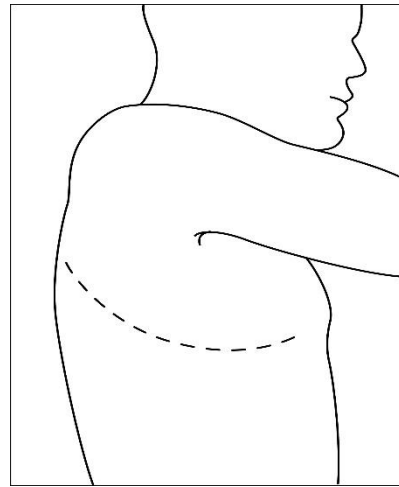
### Robotic Surgery

Robotic surgery is like thoracoscopic surgery. The surgeon controls a robot using a pair of knobs that control the robot's arms, and viewing a screen that gives a 3-D image of the chest. The arms of the robot have surgical tools and a camera that the surgeon controls. Use of the robot allows for more precise movements and use of smaller instruments.

VATS is preferred for lung surgery here at UWHC. If we cannot do a VATS, a thoracotomy is done.

### What is a thoracotomy?

A thoracotomy is a surgical incision (cut) of the chest wall that is made between muscles of the chest wall, then between two ribs. The incision is about 4 to 8 inches long.



## **Preparing for Surgery**

You can do a few things to improve your health before your surgery.

**Start walking.** Try to walk at least 20 minutes most days of the week. If you haven't been active, start slowly. Try walking 5-10 minutes a day and slowly increase the time. You will walk at least 4 times a day in the hospital after your surgery.

**Eat well-balanced, healthy meals.** Tell your surgeon right away if you are not able to eat or if you are losing weight. Healthy eating helps you heal. Poor nutrition or weight loss slows healing and may lead to problems such as infection.

**Stop smoking now if you smoke.** If you smoke anytime during the 10 days before your surgery, your surgery will be cancelled. Smoking slows healing. When you smoke, you are much more likely to get pneumonia after surgery. If you need help quitting, call:

- Smoking Cessation Clinic  
**(608) 263-0573**
- Wisconsin Tobacco Quit Line
- **1-800-QUIT-NOW (1-800-784-8669)**
- Your primary care clinic

## **How long will I be in the hospital?**

You will be in the hospital for 2-7 days (most lung surgeries are 3-5 days; pneumonectomies are closer to 5-7 days). Most people go home the same day their last chest tube is removed. Sometimes, we may wait until the next morning before sending you home.

## **Will I have pain after surgery?**

Yes, you will have pain near the incision, chest tube, and soreness. We want you to feel as comfortable as you can. It is very important that your pain is managed well so

you can cough, do deep breathing exercises, and move more easily. You will be given medicine to help with pain.

Various methods of pain control are available during your hospitalization. The team will choose the best option for your specific needs.

- **Nerve Cryoablation** the intercostal nerves (nerves of the chest space) are exposed to extreme cold and frozen which will help numb the area of surgery and helps decrease pain and the need for higher doses of pain medication.
- **A patient-controlled analgesia (PCA) pump** is a pump that releases pain medicine into your veins through an IV. You will be able to control the amount of pain medicine you receive by pressing a button.
- **An epidural catheter** is placed in the spine and delivers a constant amount of pain medicine.
- Once you start eating and drinking, you will be able to take pain pills by mouth. Let your nurse know when your pain first begins. The medicine works better if you take it before the pain becomes severe.

## **Will I have any tubes after surgery?**

You may have a variety of tubes, drains, and equipment.

One or more **chest tube(s)** will be placed during surgery. The lung on the side of the surgery is deflated to give the surgeon more room to look and work around. To re-inflate the lung, a chest tube is put in between the lung and chest wall lining. It is hooked to a container that collects excess fluid and blood. The container often connects to suction and may make a soft bubbling sound.

The chest tube will be in place for 2-6 days. Most people go home the day the chest tube is removed. Sometimes, we may wait until the next day. The number of days may vary because chest tubes can have air leaks. An air leak happens when air gets between the chest and lung linings. Most of the time, it goes away on its own. Your doctor will decide when to take the chest tube out based on the results of your daily chest x-ray.

In some cases, you may have to go home with a chest tube. If you need to go home with the chest tube it will be removed at a postoperative visit in the clinic.

An **intravenous (IV) catheter** gives fluids and medicine. Once you start eating and drinking, the IV may be capped (will not be connected to anything).

**Oxygen** is given through a mask or a small plastic tube that goes inside your nose.

A **Foley catheter** drains urine from your bladder into a bag. It will be taken out as soon as possible.

A **heart monitor** may be used for a few days to watch your heart rhythm.

### **How will I take care of my lungs?**

You will be asked to deep breathe, cough, and use an **incentive spirometer**. This helps open the small air sacs in your lungs and keeps your air passages clear to prevent pneumonia. See the First Day Surgery Booklet for more details.

### **How much activity will I be able to do?**

It is important that you become active. The day of your surgery, you will be sitting up in a chair. The next day and until you go home, you will walk in the halls 3-4 times a day.

### **How will I cope?**

It is common to have some changes in your emotions or mood for a few weeks. You may feel uncertain, scared, or even depressed. Your energy level and appetite may vary at times.

Think about doing things within your limits that you enjoy doing to help you feel good about yourself. Share activities with your family and friends and talk about your feelings. Keep in mind that people do much better when they feel as though they have support. When you feel ready, call people and have them stop by for short visits. Take time to enjoy your hobbies. Make the most of any support you have.

### **What can I expect when I go home?**

When you go home you **will** need someone to help you for the first week. Your nurse may suggest you have a home health nurse.

### **Incision Care**

Your incision may look slightly red for several days. Keep your incision clean and dry. It is okay to shower, but do not take baths or swim until it is healed. Do not rub the incisions because this prevents healing. Pat them dry. Do not put lotions, powders, or ointment on the incision area. Once healed, wear sunscreen when you are in the sun because your incision is at risk for sunburn.

Make sure to look for signs and symptoms of infection. These include:

- Increased redness or warmth at the site
- Pus like drainage
- Large amounts of swelling or bleeding
- Temperature (by mouth) greater than 100.4° F for two readings, taken 4 hours apart

When you go home, your incision may have all the staples in place or only a few. Sometimes, small pieces of tape called steri-strips are placed after your staples are removed. It is okay if these tape strips fall off, but don't pull them off. When you return for your clinic visit in 1-2 weeks, the doctors will remove staples or stitches that are left. With each clinic visit you will have a chest x-ray.

### **Pain**

You will have some pain as you become more active. When you are in pain, take your narcotic pain pills as prescribed. Because of the likely side effects (such as constipation) from these pills, you will want to take a stool softener like Colace. It is best to use other over the counter medicines to help with pain such as Extra Strength Tylenol<sup>®</sup>, this will help decrease the amount of narcotic pain pills you may need to take. You can take Tylenol on an every 6 hour schedule, just make sure you do not take more than 1g (1,000mg) of Tylenol in a 24 hour period of time.

Other great options for pain control include the use of heat and cold, meditation or distraction.

If the pain is sharp and constant or worsens, call your doctor.

### **Activity**

During your first days or weeks at home you may feel tired and sore, and you may need someone to help you. Stay active and do the things you enjoy, but pace yourself.

- **No** strenuous one-arm exercises. It is okay to use the arm on your surgery side for light activity.
- **Do not** drive for 4 weeks, or if you are taking narcotic pain pills.
- **Do not** lift greater than 10 pounds for the first 4 weeks.

### **Sexual Activity**

As you feel better, you may resume having sex. At first, you may not feel like being close because you may feel that you don't have the energy. Or, you may worry about the incision or about becoming short of breath. These are normal feelings. Just use common sense.

### **Smoking**

If you smoke, you need to quit. Stop smoking to prevent further lung damage. We know this is hard and will provide you with the support and encouragement to quit. For more details, call the **Smoking Cessation Clinic at (608) 263-0573 or the Wisconsin Tobacco Quit Line at 1-877-270-7867.**

### **Who to Call**

Surgery Clinic:

Monday – Friday, 8:00 a.m. – 4:30 p.m.  
**(608) 263-7502**

If you live out of the area, please call:  
**Toll Free 1-800-323-8942.**

After hours, the clinic number will be answered by the hospital paging operator. Ask for the **thoracic surgery resident on call.** Leave your name and phone number with the area code. The doctor will call you back.

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 6/2022 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4336.

## Your Lung Surgery Checklist

The purpose of this check list is to help prepare you for your discharge from the hospital and to make your return home as smooth as possible.

- Arrange for at least one person to be at home with you 24/7 for the first 3-4 days after surgery.** You need to have this person identified **before** surgery takes place.

**Name of the Person who will be staying with you** \_\_\_\_\_

- Most lung surgery patients will go home 3-5 days after surgery. At times your hospital stay may be longer. Your doctor will decide how long you need to stay after surgery.
- Pneumonectomy (lung removal) patients will be in the hospital longer, about 5-7 days after surgery.

It is also important to note that you may end up being discharged with this equipment.

- **Oxygen** – You may need to go home on oxygen for a short time. Most often, you will only have the oxygen for a couple of days or weeks. The hospital's Case Manager or Social Worker will help set up oxygen if it is needed.
- **Chest Tube** – You may need to go home with your chest tube still in place. If you go home with a chest tube, the Clinical Nurse Specialist on the unit will give you and your caregiver hands-on-teaching as well as written material about the chest tube and caring for it at home.