What is a bronchoscopy?
A bronchoscopy is a procedure involving the use of a bronchoscope, a lighted, flexible tube about the thickness of a pencil. The doctor will pass the tube through your nose or sometimes your mouth, into the airways of your lungs. The procedure allows the doctor to look at the airways for anything not normal. The tube may cause a slight discomfort to your nose and throat and may cause coughing. The doctor may take samples for laboratory study. This procedure will provide your doctor with information to help decide on the best treatment plan for you.

This guide is for patients who are going to have a bronchoscopy. It answers some of the most commonly asked questions. If you have additional questions, talk to your doctor or nurse for more information.

Your procedure is scheduled for:
Date: ___________________________ Time: ___________________________

- If you need to reschedule the day of the appointment, please call: (734) 936 - 9250 and select option 1. You may need to talk with the ordering clinic doctor or nurse to reschedule.
- If you have questions about your procedure, please call the endoscopy call center at (734) 936 - 9250 option 1 or (888) 229 - 7408.

How long is the procedure?
- The procedure will take about 30 to 90 minutes, but expect your visit to the Medical Procedures Unit (MPU) to last 2 to 4 hours so you can prepare and recover.
How will I prepare for the bronchoscopy?

Tell your nurse or doctor before your procedure if you:

- Have glaucoma or myasthenia gravis. This will alert the nurse to adjust your pre-procedure medications.
- Are taking any anticoagulant medications (blood thinners), such as Eliquis®, Pradaxa®, Xarelto®, Coumadin®, Plavix®, Brilinta®, or Effient® (See the table below). You will have to adjust or stop your medication before your procedure. **Ask your doctor before stopping any medication. You do not need to stop taking Aspirin** for a bronchoscopy.

If you have diabetes follow these instructions:

**People taking oral diabetes medication (pills):**

- **Do not** take the medication the morning of your test.
- Bring your diabetes medication with you.
- Please refer to the following handout: Instructions for Patients with Diabetes Having Outpatient Procedures/Tests:
  [http://www.med.umich.edu/1libr/MEND/Diabetes-PreOpAdultsNoPump.pdf](http://www.med.umich.edu/1libr/MEND/Diabetes-PreOpAdultsNoPump.pdf)

**People taking insulin:**

- Request an early morning appointment.
- On the morning of your test, **do not** take any Regular or Humalog insulin.
- Take only one-half of your usual doses of Lente, NPH, or Novolin® 70/30 insulin.
- Please review the following handout: Instructions for Patients with Diabetes Having Outpatient Procedures/Test:
Coordinate a driver to take you home after the procedure

You will not be able to drive after the procedure because you will be sedated.

- You must arrange for a responsible adult (age 18 years or older) to accompany you from the MPU.
- Your procedure will not begin until an adult driver is in the unit. Your adult driver should plan to remain in the MPU during your entire visit.
- You cannot be discharged unless your driver is available.
- You may not travel by taxi or bus unless you have a responsible adult to accompany you.
- You may not walk home after your procedure.

Follow these diet instructions:

The day before my procedure

You may eat your normal diet the day before the procedure.

The day of my procedure

8 hours before your procedure:
1. Stop eating ALL solid foods.
2. You may have sips of water with medication up until 2 hours prior to your appointment.

4 hours before your procedure:
- Take your medications, including pain medications with a few sips of water up to, but no later than 4 hours before your appointment.

2 hours before your procedure:
- Stop everything by mouth (water, smoking and gum chewing).

Bring the following with you on the day of your bronchoscopy:
- List of all medications you are taking
- List of allergies
- Health insurance cards
- Your blue University of Michigan hospital card
- A responsible adult to (eighteen (18) years of age) accompany you from the endoscopy suite after your procedure. Your procedure will begin only after the nursing staff has confirmed that you have a responsible adult who will take you home. You will not be discharged until that person is in the unit to escort you from the endoscopy suite. You will not be able to drive for at least 12 hours.

**Do not bring the following:**
- Please leave jewelry at home.
- Small children will be more comfortable at home.

If you take any of the medications below, for anticoagulation, you will have to stop medications (withhold) before the procedure as indicated in the chart below. This chart is just to prepare you for your bronchoscopy, please ask your nurse for specific instructions.

<table>
<thead>
<tr>
<th>Drug</th>
<th>When to withhold (time before procedure)</th>
<th>When to restart (hours after procedure)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warfarin (&quot;Coumadin&quot;)</td>
<td>5 days</td>
<td>24</td>
</tr>
<tr>
<td>Dabigatran (&quot;Pradaxa&quot;)</td>
<td>1–2 days+</td>
<td>24</td>
</tr>
<tr>
<td>Apixaban (&quot;Eliquis&quot;)</td>
<td>1–2 days+</td>
<td>24</td>
</tr>
<tr>
<td>Edoxaban (&quot;Savaysa&quot;)</td>
<td>1–2 days+</td>
<td>24</td>
</tr>
<tr>
<td>Rivaroxaban (&quot;Xarelto&quot;)</td>
<td>1–2 days+</td>
<td>24</td>
</tr>
<tr>
<td>Aspirin</td>
<td>No need to be withheld</td>
<td></td>
</tr>
<tr>
<td>Clopidogrel (&quot;Plavix&quot;)</td>
<td>5–7 days</td>
<td>24</td>
</tr>
<tr>
<td>Prasugrel (&quot;Effient&quot;)</td>
<td>7 days</td>
<td>24</td>
</tr>
<tr>
<td>Ticlopidine (&quot;Ticlid&quot;)</td>
<td>10–14 days</td>
<td>24</td>
</tr>
<tr>
<td>Cangrelor (&quot;Kengreal&quot;)</td>
<td>2 h</td>
<td>24</td>
</tr>
<tr>
<td>Ticagrelor (&quot;Brilinta&quot;)</td>
<td>5 days</td>
<td>24</td>
</tr>
<tr>
<td>Vorapaxar (&quot;Zontivity&quot;)</td>
<td>2–3 weeks</td>
<td>24</td>
</tr>
</tbody>
</table>
**Talk to your doctor if you are having bleeding the day after the procedure**

**Where do I go on the day of the procedure?**

You will receive a map guiding you to the MPU in the University Hospital which can also be found at the following web site: [http://www.med.umich.edu/maps](http://www.med.umich.edu/maps)

**What will happen during the procedure?**

A doctor specially trained in bronchoscopy, and at least one assistant will perform the procedure. The doctor who ordered your procedure may not be the one who performs it, but the ordering and performing doctors have discussed the necessary test(s) to be performed.

1. In the reception area you will answer questions about your health history, current medicines and allergies.
2. The nurse will review the consent form with you.
3. After you change into a hospital gown, a nurse will start an intravenous line (IV). The IV is used to give you medication to make you more comfortable during the procedure. The procedure is performed in a room specially designed for bronchoscopy procedures.
4. We will connect equipment that will help the nurse and doctor monitor your heartbeat and breathing.
5. We will numb your nose and throat with a spray and you will be sedated before the doctor passes the bronchoscope into the airway. You will be able to breathe normally during the test.
6. Medication will be administered through the bronchoscope to numb the airways as the doctor examines them. There is usually no pain associated with this test, even if a biopsy is done.
What are the risks?
Complications are extremely rare. However, there are potential complications associated with all medical procedures. These will be explained to you at the time you sign your consent for the procedure.

What should I expect in recovery?
1. After your procedure we will take you to the recovery area. One adult person may join there, if you wish.
2. Your doctor may order a chest x-ray for you after your procedure before you go home.
3. When you are ready to go home the nurse will tell you your discharge instructions and answer your questions.
4. You will receive a summary of your procedure. Most biopsy results take at least two days to be available. Some take longer.
5. You may not drive yourself home. Be sure to bring a responsible adult, licensed driver with you. You may want a family member or friend to stay with you for the remainder of the day.
6. After a biopsy it is common to have some hoarseness that lasts 1-2 days. A small amount of blood in the phlegm is also common. If you are concerned with the amount of blood call the at (734) 936 – 9250 option 1, or if it is after normal working hours, call the hospital operator, 734-936-6267, and ask to speak to the pulmonary fellow on call. Some people will experience a low grade fever a day after bronchoscopy.

How will I care for myself at home?
You will receive specific written instructions about resuming your activities, medications, and diet.
• You may return to work or school the day after your procedure
• Do not drive a vehicle or operate machinery for at least 12 hours after your procedure
• Do not make any major legal or financial decisions the day of your procedure
• Do not drink alcoholic beverages for at least 12 hours following your procedure