

Fiber Optic Bronchoscopy

Bronchoscopy is a test to view the airways and diagnose lung disease. It may also be used during the treatment of some lung conditions.

A bronchoscope is a device used to see the inside of the airways and lungs. Although it can be flexible or rigid, a flexible bronchoscope is almost always used. The flexible bronchoscope is a tube less than 1/2 inch wide and about 2 feet long. Rarely, a rigid bronchoscope is used.

The scope is passed through your mouth or nose, through your windpipe (trachea), and then into your lungs. Going through the nose is a good way to look at the upper airways. The mouth method allows the doctor to use a larger bronchoscope.

If a flexible bronchoscope is used, you will probably be sedated.

The doctor will spray a numbing drug (anesthetic) in your mouth and throat. If the bronchoscopy is done through the nose, numbing jelly will be placed on one nostril.

Inserting the bronchoscope will make you cough at first. The coughing will stop as the numbing drug begins to work. When the area feels thick, it is numb enough.

You will likely get drugs through a vein (intravenously) to help you relax. Only rarely will you be asleep under general anesthesia.

Once you are numb, the tube will be inserted into the lungs.

The doctor may send saline solution through the tube. This washes the lungs and allows the doctor to collect samples of lung cells, fluids, and other materials inside the air sacs. This part of the procedure is called a lavage. Sometimes, tiny brushes, needles, or forceps may be passed through the bronchoscope and used to take very small tissue samples (biopsies) from your lungs.

The doctor can also place a stent in the airway or view the lungs with ultrasound during a bronchoscopy.

A rigid bronchoscope requires general anesthesia.

Local numbing medicine (anesthesia) is used to relax and numb muscles. Until the anesthetic begins to work, you may feel fluid running down the back of your throat and you may cough or gag.

Once the medicine takes effect, you may feel pressure or mild tugging as the tube moves through the windpipe (trachea). Although many people feel like they might suffocate when the tube is in the throat, there is NO risk of this happening. The medicines given to relax you help with these symptoms and will help you forget most of the procedure.

When the anesthetic wears off, your throat may be scratchy for several days. After the test, the cough reflex will return in 1 - 2 hours. You will not be allowed to eat or drink until your cough reflex returns.

Common reasons to perform a bronchoscopy for diagnosis are:

- Lung growth, lymph node, atelectasis, or other changes seen on an x-ray or other imaging test
- Suspected interstitial lung disease
- Coughing up blood (hemoptysis)
- Possible foreign object in the airway
- Cough that has lasted more than 3 months without any other explanation
- Infections in the lungs and bronchi that cannot be diagnosed any other way or need a certain type of diagnosis
- Inhaled toxic gas or chemical
- To diagnose a lung rejection after a lung transplant

You may also have a bronchoscopy to treat a lung or airway problem, such as to:

- Remove fluid or mucus plugs from your airways
- Remove a foreign object from your airways
- Widen (dilate) an airway that is blocked or narrowed
- Drain an [abscess](#)
- Treat cancer using a number of different techniques
- Wash out an airway (therapeutic lavage)

Normal Results

Normal cells and fluids are found. No foreign substances or blockages are seen.

What Abnormal Results Mean

Many disorders can be diagnosed with bronchoscopy, including:

- Granulomas
- Infections from bacteria, viruses, fungi, parasites, or tuberculosis
- Lung damage related to allergy type reactions
- Lung disorders in which the lung tissue becomes inflamed and damaged
- Lung cancer or cancer in the area between the lungs
- Narrowing (stenosis) of the trachea or bronchi
- Rheumatoid lung disease
- Sarcoidosis
- Vasculitis

The main risks from bronchoscopy are:

- Bleeding from biopsy sites
- Infection

There is also a small risk of:

- Arrhythmias (irregular heart beat)
- Breathing difficulties
- Fever
- Heart attack, in people with existing heart disease
- Low blood oxygen
- Pneumothorax
- Sore throat

In the rare instances when general anesthesia is used, there is some risk for:

- Muscle pain
- Change in blood pressure
- Slower heart rate
- Nausea
- Vomiting

There is a small risk for:

- Heart attack

When a biopsy is taken, there is a risk of severe bleeding (hemorrhage). Some bleeding is common. The technician or nurse will monitor the amount of bleeding.

There is a risk of choking if anything (including water) is swallowed before the numbing medicine wears off.

Do not eat or drink anything 6 - 12 hours before the test. Your doctor may also want you to avoid any aspirin, ibuprofen, or other blood-thinning drugs before the procedure.

You may be sleepy after the test, so you should arrange for transportation to and from the hospital.

Many people want to rest the following day, so make arrangements for work, child care, or other obligations. Usually, the test is done as an outpatient procedure, and you will go home the same day. Some patients may need to stay overnight in the hospital.

Location: Diagnostic Treatment Center at Dekalb Medical Center
located in the main hospital building on the ground floor; enter through the Emergency Room.

Arrival: Patient to arrive one hour prior to procedure to register and be clinically evaluated and prepared for the procedure.

Instruction: NPO after midnight (nothing by mouth after midnight)

Take your usual medications with the exception of diabetics on insulin or drugs that lower blood glucose.

Do not take aspirin or aspirin-containing products for 5-7 days prior to the procedure

Special Instructions are required for patients on coumadin

Because you will be sedated, you cannot drive after the procedure is over. You must have someone to drive you home after the procedure or it will not be performed. This is for your safety. You may not take a taxi by yourself or a bus.

Follow-up: A return appointment to discuss the results will be scheduled for approximately one week after the procedure.