Bronchoscopy

What is a bronchoscopy?

Bronchoscopy is a procedure that allows a doctor to look inside your lungs and airways. It’s done with a long, thin tube with a camera at the end (a bronchoscope).

Bronchoscopy is used to find the cause of a problem in the airway or lungs. It can also be used to treat a problem like a blockage in the airway.

Why do I need it?

You may need a bronchoscopy if your doctor thinks there is a problem or disease in your lungs. Your doctor may also want to get a better view of something unusual seen on an imaging test like computerized tomography (CT).

A bronchoscopy can be used to:

- Find the cause of breathing difficulties or coughing
- Take samples of tissue or mucus for testing
- Remove a blockage in your airway
- Control bleeding
- Diagnose infections in the lungs or airways, scarring from repeated infections, cancer, or other diseases

Talking with your healthcare providers about bronchoscopy

The table below lists the most common potential benefits, risks and possible problems, and alternatives for bronchoscopy. Other benefits and risks may apply in your unique situation. Talk with your healthcare provider to learn more about these risks and benefits.

<table>
<thead>
<tr>
<th>Potential benefits</th>
<th>Risks and possible problems</th>
<th>Alternatives</th>
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<tbody>
<tr>
<td>Bronchoscopy can:</td>
<td>Problems are rare, but may include:</td>
<td>Depending on your condition, alternatives to bronchoscopy may include:</td>
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<tr>
<td>• Diagnose a problem in the airways</td>
<td>• Spasms of the walls in the airways</td>
<td>• A CT scan</td>
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<td>• Treat a problem in the airways</td>
<td>• Irregular heartbeat</td>
<td>• Surgery (to obtain tissue samples)</td>
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<td>• Take tissue or fluid samples for testing</td>
<td>• Infection</td>
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<td>• Hoarse voice</td>
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<td>If a tissue sample is taken for testing, problems may include:</td>
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<td>• A tear in the lung from the tiny tools used, allowing air into the space around the lungs (a pneumothorax)</td>
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<td></td>
<td>• Bleeding</td>
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<td>• Death</td>
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How do I prepare for a bronchoscopy?

- Tell your doctor about any allergies you have and all medicines and vitamins you’re taking.
- Follow your doctor’s advice about medicine. Your doctor may want you to avoid aspirin or other anti-inflammatory medicines before the procedure.
- Don’t eat or drink anything for 6 to 12 hours before the procedure.
- Arrange for a responsible adult to drive you home from the hospital. You will be given medicine during the procedure to help you relax and you won’t be safe to drive.

How is it done?

Bronchoscopy is performed by a doctor who specializes in lung diseases (a pulmonologist). You will have one of the two types of bronchoscopy: flexible or rigid.

Flexible bronchoscopy

A flexible bronchoscope can bend to give the doctor a better view of your airways. It’s more comfortable than rigid bronchoscopy and doesn’t require general anesthesia to put you to sleep. This is the most common type of bronchoscopy.

If you have a flexible bronchoscopy:

- You may remain awake during the procedure. You may be given medicine to help you relax and not feel pain.
- An IV (intravenous) line will be placed in a vein.
- A medicine will be sprayed into your mouth or nose so you don’t feel pain. This may taste bitter.
- The doctor will gently insert the bronchoscope into your mouth or nose and toward your vocal cords. More medicine will be sprayed through the bronchoscope to numb your vocal cords.
- You may feel pressure in your airway as the bronchoscope is moved around.
- A large x-ray machine may be placed above you to help the doctor position the bronchoscope.
- Tissues or fluid samples may be taken using tiny tools at the end of the bronchoscope.

Rigid bronchoscopy

A rigid bronchoscope doesn’t bend. It’s used to remove large tissue samples for testing. It can also clear the airway of objects that can’t be removed with a flexible bronchoscope. It’s less common than flexible bronchoscopy and usually requires general anesthesia.

If you have a rigid bronchoscopy:

- You’ll be given general anesthesia so you will be completely asleep during the procedure. You won’t feel any pain.
- An IV line will be placed in a vein.
- A breathing tube will be placed in your throat and a machine will help you breathe.
- Once you’re asleep, your head will be tilted back. Your doctor will gently insert the bronchoscope into your mouth and throat.
- Tissues or fluid samples may be taken using tiny tools at the end of the bronchoscope.

What happens after the procedure?

With either type of bronchoscopy, the procedure usually takes between 30 and 60 minutes.

After it’s over:

- You’ll stay in a recovery area until you’re ready to go home.
- You may have trouble swallowing for about 2 hours. Don’t eat or drink anything until you can swallow without choking. Spit out your saliva.
- Don’t smoke for at least 24 hours. Nicotine patches may help.
- If a tissue sample was taken, you may spit up some blood.
- You may have a sore throat or a hoarse voice for a few days.