

## Flexible bronchoscopy

### What is a flexible bronchoscope?

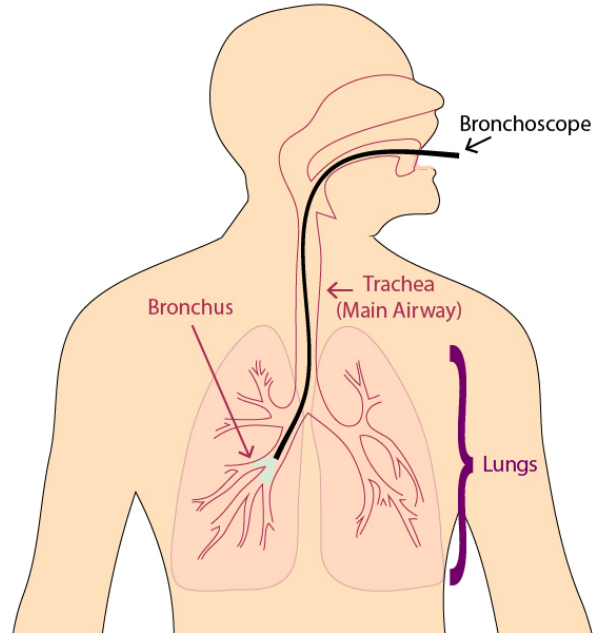
A flexible bronchoscope is a small flexible tube that is about as thick as a pencil. The tube contains a fibre-optic system that is connected to a camera with a bright light at the end. The image from the end of tube is carried through to a video system allowing us to look deep down into the lungs.

### What is flexible bronchoscopy?

This is a procedure where the bronchoscope is used to look at various parts of the airways of your child.

The bronchoscope is passed through either the mouth or nose, then through the voice box (larynx), wind pipe (trachea) and then into the lower airways (bronchi).

The doctor performing the procedure will be able to see these structures during the different stages of breathing. He/she may also take pictures and record video images. These images are useful for the doctors taking care of your child to diagnose any problems and monitor the progress of any abnormalities.



## Going under General Anaesthetic

This procedure is performed under General Anaesthetic (GA) so your child will be asleep during the entire procedure. Your child's anaesthetist will discuss the details and risks of the anaesthetic with you, usually on the day unless you or your doctor have concerns. You will be contacted by the Anaesthetics Department about what you need to do to prepare, include fasting (not eating or drinking).

When you meet with your anaesthetist you can discuss options for medication before the procedure and what your child can bring with them when they have the procedure, such as a teddy bear that can be with them when they are anaesthetised and when they wake up.

Bronchoalveolar lavage (BAL) samples may be taken during the procedure. This involves the doctor washing a small quantity of salty water (saline) down the bronchoscope into the lower airways and then sucking it back through the bronchoscope into a collection bottle. The fluid obtained contains secretions/mucus from the lungs and airways. Fluid collected will be examined

for the presence of infection and inflammation in the lungs. Some fluid will not be recovered from the lungs but will be absorbed by the body.

## How long does it take?

Once your child is anaesthetised and all the monitoring equipment is in place, the bronchoscopy procedure usually only takes 15-30 minutes. Following the procedure your child will be monitored until the effects of the anaesthetic wear off. This can take an additional 1-2 hours but your anaesthetist may be able to give you a better estimate specific to your child.

## Will I be with my child at the time?

A family member can be with your child during the anaesthetic procedure, right up until your child goes to sleep. At this point in time, you will be taken to the waiting area and will be called back in as your child wakes up in the recovery room. The doctor will often see you shortly after the procedure to discuss the findings.

## When can I go home with my child?

Your child must be completely awake, be able to drink fluids and keep them down, and be back to their normal self before they are ready for discharge home. If there are any concerns your doctor may decide to keep you in a bit longer, sometimes overnight. If you can go home the same day of the procedure we ask you to stay within the Perth metropolitan area for at least 24 hours.

## What are the risks of this procedure?

Anaesthetic complications will be discussed with you by the anaesthetist. Bronchoscopy is a relatively safe procedure. The chance of having a complication is small.

### Common side effects:

- **Coughing:** Coughing or worsening of a cough after the procedure is normal and usually gets better in a day or two.
- **Stridor and wheezing:** These terms are used to describe types of noisy breathing. If your child has noisy breathing prior to the procedure, this may temporarily get worse and should settle down in a couple of days. Some children especially with lung diseases like asthma may need additional medication to treat signs of wheeze before, during and after the procedure.
- **Soreness in the throat or a hoarse voice:** this is quite common and usually gets better within a day or so.
- **Fever:** a mild fever may occur but will usually settle quickly.

### Uncommon risks (<5%)

- **Low oxygen levels:** If this occurs your child will be given oxygen. Usually this will get better within a few hours but if ongoing, your child may need to stay overnight.

## Rare (<1%)

- **Bleeding:** This can rarely occur when brushing the airways, especially if the airways are very infected and inflamed. Sometimes bleeding can occur from the nose if the bronchoscope is passed through the nose. The bleeding is usually minimal and your child may have blood-stained sputum/mucus or nasal secretions, which almost always resolves by itself within a day. Major bleeding is extremely uncommon. **Aspiration pneumonia:** This is where vomit or regurgitation enters the lungs. This is not usually a concern if your child has fasted properly.

Other more severe complications like pneumothorax (air leak into chest) and damage to airways are extremely rare.

## Please note

Occasionally it may be decided to admit your child to hospital following a bronchoscopy. This could be because of something found during the procedure, or because it is the safest way to manage a complication. **If hospitalisation is thought to be necessary then it will be discussed with you as soon as possible.**



Government of **Western Australia**  
Child and Adolescent Health Service



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**Child and Adolescent Health Service**  
15 Hospital Avenue, Nedlands, WA, 6009  
Telephone: (08) 6456 2222  
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