Your appointment is on:-

Date: .................................................................

Time: .................................................................

Place: Llanwenarth Suite, Endoscopy Unit, Nevill Hall Hospital

Please contact Dr Thomas’ Secretary immediately if you are unable to make this date on:- 01873 - 732991
**Having a bronchoscopy**
You have been advised to have a test called a bronchoscopy to help find the cause of your symptoms. This booklet has been prepared after talking to patients who have had the test. It may not answer all your questions, so if you have any other questions please do not hesitate to ask. The nursing staff who are usually involved in the test will be available to answer any queries. Please contact them on: 01633 - 234225.

**What is a bronchoscopy?**
A bronchoscopy is a test by which a doctor can look directly at the trachea (windpipe) and the bronchi (breathing pipes). (Please see diagram 1) This will reveal a clear view of the different areas of your lungs. It allows samples of tissue to be taken painlessly for testing. The bronchoscope is a thin flexible tube with a bright light and camera on the end which is passed through your nose (or mouth) and down into the airways of the lungs.

**What should I expect?**
**The preparation**
It is important to note that the unit cares for both male and female patients in a mixed bay. Your privacy will be maintained at all times.

As Aneurin Bevan Health Board (ABHB) is a teaching Trust there may be nursing or medical students present at your test. If you do not wish for them to observe your bronchoscopy, please feel free to inform us and your wishes will be respected. This will not affect the treatment you receive.

Please read this leaflet very carefully **before** you come to the department for the test.

A doctor should explain the test to you in detail, either in chest clinic or on the ward, prior to the bronchoscopy appointment and will then sign the consent form once he or she is happy that you have understood. A nurse will then arrange the date for your appointment.

You will then have been given this booklet and your consent form which the doctor has signed. Please take both these documents home and read them carefully. Discuss them with a trusted friend or family member if you like. **Once you understand the procedure, please sign the consent form and bring it with you to the endoscopy unit.** If you have any questions, please bring the form with you to the department and ask the nurse or doctor to clarify anything that it is not clear. If you are then happy to undergo the bronchoscopy you may sign the form in the endoscopy unit once your questions have been answered.
When you come to the department a nurse will again explain the procedure and then ask you some questions. The nurse will check that you have signed the consent form and understand the test and its implications.

They will want to know about any previous bronchoscopy you may have had.

Please report any chest pain, chest infections or bad episodes of wheezing to the nurse on admission to the endoscopy unit. It is preferable to remove contact lenses and glasses. If you have false teeth that are loose these must be removed before the test.

You will be asked not to eat or drink for 4 hours before the test.

Please inform the chest clinic BEFORE the date of your Bronchoscopy if you are on Warfarin, as this must often be stopped for up to one week before we can do the test.

Please inform us if you are a diabetic or if you have a damaged or synthetic heart valve as special arrangements will need to be made.

Please do not bring any valuables to hospital.

Please do not wear any nail varnish as this can interfere with the machine we use to monitor your oxygen levels.

Please bring a list of your current medicines with you.

Sedation
It is usually necessary to have sedation for this test. You will be given a small injection into a vein in the back of your hand or arm. Sedation is likely to make you sleepy and you may not remember the procedure taking place at all. This is not a general anaesthetic.

You may wake up fairly quickly or more slowly. Each person reacts differently. You will probably have to remain in the unit for about 2 hours after the test.
The full effects of the sedation may not wear off totally for 24 hours. For this period your thinking processes and movements may be slower than usual. For the first 24 hours after having sedation you should not:-

- Drive a car or operate any machinery
- Drink alcohol
- Sign any legally binding documents
- Cook or pour any hot liquids (i.e. a kettle)

The effects of the test and the sedation should have worn off after 24 hours by which time you should be able to resume your normal activities.

If you do not wish to be given any sedation, please discuss this with the doctor who is doing the test and this can usually be arranged.

During the test
In the examination room you will be made comfortable on a couch in a sitting or lying position.

Local anaesthetic will be sprayed into your nose and through your mouth to the back of your throat. This can taste rather bitter or cause a short-lived burning sensation. You may then have the feeling of a lump in your throat once the anaesthetic starts to work.

A small oxygen monitor will be placed on one of your fingers and a soft plastic oxygen tube may be placed in one of your nostrils to give you some extra oxygen.

The doctor is then likely to give you a sedative injection into a vein in your arm or hand. This will make you feel sleepy and relaxed. Some people actually fall asleep while others remain drowsy. Some people have a short period of time that they can not remember after the sedation is given during which the bronchoscopy takes place.

When the local anaesthetic has started to work, the doctor will pass the bronchoscope gently into your nose and through the vocal cords (voice box) and then down into your windpipe. Occasionally it is passed through your mouth via a small plastic mouthpiece (if your nose is a little narrow). The tube will not interfere with your breathing. Extra local anaesthetic is sprayed through the bronchoscope into your lungs as they are examined.

The doctor then has a clear view of different areas of your lungs and can check whether or not any disease is present.
Some people do cough or experience some irritation in the throat or chest tightness, but you will be able to breath through out.

The doctor may then take some tiny samples either using forceps (biopsies) or using a tiny brush (brushings) or by using a small amount of sterile salty water to wash the breathing tubes (washings). You will not feel any pain while this is done. It usually takes about 20 minutes to examine all the areas carefully and collect the samples, but occasionally the test may take a little longer.

**Risks and side effects**

Bronchoscopy is usually a very safe procedure with few side effects. Minor side effects include coughing up a little bit of blood (haemoptysis) for a few days or a sore throat.

The risk of serious complications including chest infections, irregular heart rhythm or suppression of breathing has been shown to be less than 1 in 1000.\(^1\)

A biopsy from the bronchi (air passage) is very safe. However all bronchoscopies carry a 1 in 1000 risk of bleeding.\(^2\)

Should the doctor feel it is necessary to take biopsies (tissue samples) from the lung itself (transbronchial biopsies) then there is a 1 in 100 risk of pneumothorax.\(^3\) This is where the affected lung collapses because of an air leak. If this happens you may need to be admitted to hospital and you may need a chest drain to be inserted so the lung can be re-inflated. A chest x-ray is taken following a trans-bronchial biopsy to check for any pneumothorax. Although this is most likely to occur at the time of the biopsy, if you develop sudden breathlessness within the next 24 hours you should attend your local hospital, inform them of your recent bronchoscopy.

**Transbronchial biopsies will not be collected unless this has been discussed with you and the doctor has gained your specific consent.** The room may need to be darkened and the doctor may wish to use an X-Ray machine to help them collect transbronchial biopsies from the correct part of your lungs.

Another rare complication is a reaction to the intravenous sedative drug or the local anaesthetic throat spray. There is approximately a 1% risk of this.\(^4\) **Please tell us if you think you have ever had a reaction to any medicines in the past.**
After the test
Once the examination is finished the bronchoscope is removed quickly and easily, causing very little discomfort.

If you have had sedation you will be left to rest in the Endoscopy Unit for at least one and a half hours. Some people remember very little of the test.

Because your throat will have been numbed it is not safe to eat or drink for at least one hour. The nurse will let you know as soon as your swallowing reflex has returned to normal.

After the test you may notice a few streaks of blood in your sputum (phlegm). This will usually pass within 24 hours.

Going home
Once you have fully recovered from the procedure the nurse looking after you will let you know that you can go home. It is essential that a responsible adult comes to the Endoscopy Unit to pick you up. When you return home it is important for you to rest quietly for the remainder of the day. You should be with someone for 24 hours after the procedure until the sedation is fully worn off.

If you live alone and cannot arrange to stay with someone or have someone to stay with you for this time please let us know as soon as possible. It may be necessary for you to be admitted to the hospital overnight, whilst you completely recover from the sedation. Alternatively it may be possible for you to have the test without sedation.

When do I know the results?
Usually the results of the bronchoscopy will be discussed with you in clinic. We do not tend to discuss the results immediately after the procedure as most patients have had sedation and may not remember what is discussed.

If samples (biopsies, brushings or washings) have been taken, the results will take at least a week. You should be seen in chest clinic shortly after this to discuss the results.

If the bronchoscopy is being done for suspected tuberculosis it can take up to 6 weeks to get all of the results.

If you have been told you need a CT scan of your chest, the doctor may wait until the results of your scan and bronchoscopy are both ready before seeing you again in clinic.
You should discuss the details of the results and necessary treatment with the hospital specialist doctor who referred you for the test at your next outpatients’ appointment. A member of your family or close friend are welcome to come to clinic with you to hear the results.

**Location and address**:–

Llanwenarth Suite  
Endoscopy Unit  
Nevill Hall Hospital

The Llanwenarth Suite is signposted directly from the Brecon Road entrance and you do not need to enter the main hospital to find it.

**Useful telephone numbers**

Llanwenarth Suite:- 01873 – 732680  
01873 – 832668

Dr Thomas’ Secretary:- 01873 – 732991

**References**:– (1), (2), (3), (4)

“British Thoracic Society Guidelines on diagnostic bronchoscopy. Thorax 2001;56(supple 1) i1 - i21”. 