



York and Scarborough  
Teaching Hospitals  
NHS Foundation Trust

# Lung Diagnostic Tests

Information for patients, relatives and carers

① For more information, please contact:

The Macmillan Lung Cancer Care Team

York: 01904 726956

Scarborough: 01723 342493

[yhs-tr.lungcnsteam@nhs.net](mailto:yhs-tr.lungcnsteam@nhs.net)

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# Introduction

The consultant responsible for your care may have advised you to have some further tests. This booklet has been written to inform you about these tests.

You may need to have more than one test, though it is unlikely that you will need all (or even most) of the tests described. The lung nurses will direct you to the information you need if a particular test is planned.

Most tests are performed in York or Scarborough, though you may need to travel to either St James's Hospital, Leeds or Castle Hill Hospital, Hull for some tests.

This leaflet will cover the following tests:

- CT Scan
- PET-CT Scan
- CT- and Ultrasound-Guided Biopsy
- Bronchoscopy & EBUS
- Pleural Aspiration
- Pulmonary function tests & CPET

# **CT scan**

## **What is a CT scan?**

A CT (computerised tomography) scan is an x-ray scanner which gives three-dimensional images of the body. You will lie on a flat bed that passes through a large doughnut-shaped unit to obtain the images. The hole is wide and short so you should not feel confined.

## **Are there any risks of having a CT scan?**

Your CT scan uses x-ray radiation. In high doses this can be harmful, but we use the smallest amount needed. The benefit of the information gained will be much greater than the radiation risk. Please let the department know in advance if you may be pregnant.

## **What do I need to do to prepare for the scan?**

This will be explained to you by phone or in a letter. It may include not eating or drinking for a time before your scan.

## **What happens in the scanning department?**

You may need to remove jewellery, hairpins, and hearing aids, and you may be asked to change into a hospital gown. We ask you to wear clothing without metal zips, buttons, buckles or other metal fastenings (including bras). Changing facilities are available.

You will be given a carrier bag to put your belongings in and you should always keep this with you. Dressing gowns are not provided so you may wish to bring your own.

If we are scanning your abdomen you may be asked to drink an aniseed flavoured liquid or some water before your scan. This helps to show up your stomach and/or bowel on the scan.

## **Will I need an injection?**

Depending upon the type of scan, you may need a contrast dye injection. This highlights vessels and organs and helps to give clear pictures. The injection is given through a needle inserted into a vein before the procedure. The needle will stay in place for 15 minutes following the examination and then be removed.

The injection may make you feel warm all over but should not cause undue discomfort. There is a slight risk of an allergic reaction to the contrast injection, which may cause a skin rash or nausea. Rarely more serious complications can occur. There is a theoretical risk of death, estimated to be approximately one in 170,000.

Doctors in the radiology department are trained to deal with complications, and the benefit from the injection far outweighs the risks. However, if you have had an allergic reaction to x-ray contrast in the past you must let the radiographer know before you go in for the scan.

## **Who will perform my scan?**

A radiographer will carry out your scan. They will explain the procedure and answer any questions that you may have. Your scan will be reviewed and reported by the radiologist (a doctor trained to interpret x-rays), but usually after you have left the department.

The results will be sent to the doctor that referred you for the scan and they will discuss the results with you.

## **Are there any side-effects?**

The aniseed flavoured drink can cause some loose stools, which should stop as soon as your bowel has been emptied of the drink (usually around 24 hours). We advise you to visit the toilet immediately after your scan and again before leaving the hospital.

Contact your GP if you have persistent symptoms beyond 48 hours. After your scan you can carry on as before and eat and drink normally.

## **How do I find the CT scanning department?**

In both York and Scarborough hospitals we have CT scanners located within the main radiology department and on mobile vans parked outside. Please report to the location detailed in your appointment letter.

On both sites, allow plenty of time to find a parking space. The York hospital multi-storey car park is 'pay on exit' so please bring money for the ticket machine. If the York hospital car park is full, there is a public car park on Union Terrace. Scarborough hospital also has a visitors' car park that is clearly signed from the entrance and is also 'pay on exit' which will require you to pay at the ticket machine.

## **What if I have questions?**

If you have any questions or problems, please phone the York CT appointments clerk on 01904 725936 or the Scarborough CT appointments clerk on 01723 342044 before your appointment. Alternatively, you can contact your lung nurse.

# **PET-CT scan**

## **What is a PET-CT scan?**

Positron emission tomography (PET) scans are used in combination with a CT scan to provide even more detailed images of the inside of your body. These scans are helpful to determine whether/how far a cancer has spread, or to help plan surgery and other treatments. PET scanners work by detecting the radiation given off by a substance injected into your arm (called a “radiotracer”) as it collects in different parts of your body.

## **Preparing for a PET-CT scan**

PET-CT scans are usually carried out as an outpatient. It is important to arrive on time for your scan as the radiotracer used has a short shelf life and your scan may be cancelled if you are late. Your appointment letter will mention anything you need to do to prepare. You will usually be advised not to eat anything for six hours beforehand and will be asked to remove jewellery and clothes that contain metal parts.



## **What happens during the scan?**

Before the scan a radiotracer is injected into a vein in your arm or hand. You'll need to wait quietly for about an hour for it to be absorbed by the cells in your body. It's important to relax, keep as still as possible, and avoid talking while you wait because moving and speaking can affect where the radiotracer goes in your body. You'll be able to go to the toilet if needed before the scan.

You'll then lie on a flat bed which moves through the centre of a large cylindrical scanner. The scan usually takes up to 30 minutes and you will need to stay still during this time. There is a buzzer for you to alert the medical team if you feel unwell at any point.

## **After the scan**

You shouldn't experience any side-effects and can usually go home soon afterwards. Results will be sent to your specialist to discuss at your next appointment.

## **Are there any risks?**

Any radiation exposure carries a very small risk of tissue damage that could lead to cancer at a later date. The amount of radiation for a standard PET-CT scan is small – about the same as the amount you get from natural sources, such as the sun, over three years.

The radiotracer quickly becomes less radioactive and will usually be passed out of your body within a few hours. Drinking plenty of fluid after the scan can help flush it from your body. As a precaution, you may be advised to avoid prolonged close contact with pregnant women, babies or young children for a few hours after having a PET scan because you'll be slightly radioactive during this time.

# **CT-guided lung biopsy**

If you have been asked to have a CT guided lung biopsy, we will also give you a separate leaflet with more information about lung biopsy.

## **What is a CT-guided lung biopsy?**

A CT-guided lung biopsy is a test in which small pieces of abnormal lung tissue are removed using a needle passed through the skin, between the ribs and into the lung, without the need for an operation. This procedure is performed using local anaesthetic, and the CT scanner is used to check that the needle is placed in the correct position. After the biopsy has been completed a pathologist will examine the tissue under a microscope.

## **Why do I need a CT-guided lung biopsy?**

Your doctor is concerned about a problem in your lung that has shown up on another test such as a scan. A lung biopsy is a good way to find out what the problem is and what treatment you may need by examining a tiny piece of tissue under a microscope.

## **How do I prepare for the CT-guided lung biopsy?**

If you receive treatment for diabetes or take blood thinning medications, please inform the doctor or tell the team in the radiology department at least seven days before the procedure so that you can be advised when to stop or take your medication.

Please also ensure you inform them of any allergies you may have.

You will need a responsible adult to take you home.

If you live alone, you need to arrange for a responsible adult to stay the night with you. If this isn't possible, we will suggest you stay in hospital overnight.

## **What happens during the procedure?**

You may be asked to stop eating and drinking for a few hours before your procedure. You can still drink water after this time.

You will usually be admitted into hospital before your biopsy. Depending on the time of your biopsy, you may be asked to stay in hospital overnight. We advise that you prepare for an overnight stay just in case. You will be contacted on the morning of the procedure to confirm where to come.

A member of staff will see you and take a short medical history.

The biopsy will be carried out in the CT scanning room. It will be done by a radiologist (a doctor that specialises in examinations and procedures using x-rays and scanning equipment). They will answer any questions you have about the procedure and you will be asked to sign a consent form to go ahead with the CT biopsy.

A lung biopsy usually takes around 45 minutes. You will be awake during the procedure and will be asked to lie flat on a table which goes inside the CT scanner, either on your front or your back depending on where the sample needs to be taken from. Please let your doctor or the radiology department know in advance if you do not think you will be able to lie flat for up to 45 minutes.

The radiologist will clean an area of your chest and cover the area with a sterile sheet. They will then inject local anaesthetic into your skin. Your skin will sting a little before going numb, then the correct site will be identified, and the needle inserted. You may experience a pushing sensation as the needle goes in but if you feel pain, please tell the radiologist, who may be able to give you more local anaesthetic. They will insert the needle between your ribs into the abnormal area in your lung and will use the CT scanner to confirm the correct position.

Once the needle is in the right position, the radiologist will take the biopsy – you will hear a click as it is taken. This may be repeated several times. Once the radiologist is happy, they have sampled enough tissue, the biopsy site will be covered with a dressing.

## **What happens after the CT guided lung biopsy?**

After the procedure you will be taken back to the ward to rest. The healthcare team will carry out routine observations such as checking your blood pressure and pulse.

A chest x-ray may be taken several hours after your procedure to check for any small air leaks. Once you have recovered enough you should be able to go home after a few hours.

Once at home, if you develop severe chest pain or sudden shortness of breath, call an ambulance. If you develop a high temperature lasting more than 12 hours, or you cough up more than an egg-cup full of blood, let your GP know straight away.

Most people can return to normal activities the next day. A chest x-ray may be taken an hour or more after your procedure to ensure there are no complications.

## **When do I get the results?**

It usually takes at least a week for the laboratory to complete the initial tests needed on the tissue sample. The healthcare team will arrange for you to come back to the clinic or be telephoned with a result.

## **Are there any risks or complications?**

The risk of complications occurring during or after the procedure is taken from studies of people who have had that procedure. Sometimes the risk for a person is different than the quoted levels. Your doctor may be able to tell you if the risk is higher or lower for you.

Some complications can be serious and can even cause death (risk: less than one in 1,000 procedures). The risk is higher if your lungs are scarred. The possible complications of a lung biopsy are listed below.

- Pneumothorax, where air escapes into the space around your lung (risk: one in six). This is usually small and does not cause any problems, however if a lot of air escapes this can cause a large pneumothorax (risk: less than seven in 100). The air will then need to be sucked out using a needle (aspiration) or let out by inserting a tube in your chest (chest drain). If this happens you will need to stay in hospital for several days. If you suddenly become short of breath or have severe chest pain while at home, call an ambulance.

- Bleeding (risk: less than two in 10). This may happen on the skin surface or inside the chest. If it is inside your chest, you may cough up some blood. This usually settles by itself, however if it were to continue, then other procedures including a blood transfusion, intravenous fluids or an operation may be needed, although this is very rare. It is normal to cough up some streaks of blood for one to two days. Tell your doctor if you cough up more than an egg-cup full of fresh blood.
- Pain. You may experience a pushing sensation as the needle goes in but if you feel pain, please tell the radiologist, who may be able to give you more local anaesthetic. As the local anaesthetic wears off, painkillers should help to keep you comfortable.
- Infection. The healthcare team will take precautions throughout the procedure to minimise this risk.

There is also a small risk of a reaction to the local anaesthetic agent used.

Unfortunately, not all biopsies are successful, and sometimes the sample taken is unsatisfactory. This may mean a repeat or alternative procedure is needed.

Despite these complications the procedure is generally safe and will be beneficial in ensuring that an accurate diagnosis of your condition is made.



# **Ultrasound-guided biopsy**

## **What is an ultrasound-guided biopsy?**

An ultrasound-guided biopsy is a way of taking a small sample of tissue from part of your body without the need for an operation. This can be used to sample tissues such as a lymph node in your neck or a part of your liver, by inserting a needle under local anaesthetic. The ultrasound probe is used to place the needle in the best position. After the biopsy has been completed and you have gone home, a pathologist will examine the tissue under a microscope.

If you have been asked to have a liver biopsy, please also refer to the separate leaflet entitled 'Liver Biopsy', which explains this procedure in more detail.

## **Why do I need an ultrasound-guided biopsy?**

You may have had other tests such as a CT scan which has suggested an abnormality. To obtain a diagnosis a piece of tissue may be needed for the lab to examine.

## **How do I prepare for the ultrasound-guided biopsy?**

If you receive treatment for diabetes or take blood thinning medications, please inform the doctor or the radiology department well in advance so you can be advised when to stop or take your medication.

## **What happens during the ultrasound-guided biopsy?**

You may be admitted into hospital before your biopsy, and for some biopsies, you may be asked to stay in hospital overnight. We may advise you to prepare for an overnight stay just in case.

Depending on the type of biopsy, a member of staff will see you and ask you a few questions. They will answer any questions you have about the procedure and you will be asked to sign a consent form to go ahead with the biopsy.

The biopsy will be done in the radiology department by a radiologist (a doctor that specialises in examinations and procedures using x-rays and scanning equipment). The ultrasound probe is used to check that the needle is placed in the correct position. An ultrasound-guided biopsy usually takes less than 30 minutes.

The radiologist will clean the skin over the area to be biopsied and cover the area with a sterile sheet. They will then inject local anaesthetic into your skin.

Your skin will sting a little before going numb, then the correct site will be identified, and the needle inserted to take the biopsy. You will feel a pushing sensation as the needle goes in but tell the radiologist if you feel pain, as they may be able to give more local anaesthetic. The needle will often make a loud clicking sound as the sample is taken. Several samples may be taken to ensure that there is enough to analyse.

Once the radiologist is happy that there is enough tissue, the biopsy site will be covered with a dressing.

## **What happens after the ultrasound-guided biopsy?**

Depending on the type of biopsy, you may be able to go home straight after, or you may be taken back to the ward, where nurses will carry out routine observations, such as checking your blood pressure and pulse to ensure there are no complications.

## **Are there any risks or complications?**

An ultrasound-guided biopsy is a safe procedure, but as with all procedures complications can arise.

There is a small risk of bleeding from the biopsy site or from the organs nearby. If the bleeding were to continue, then intravenous fluids or even a blood transfusion may be necessary (though the likelihood of this is very low).

In the unlikely event of bleeding persisting for longer, an operation or other procedure could be required to stop the bleeding.

There is a small risk of infection from the procedure, or of a reaction to the local anaesthetic agent used.

As with any medical procedure, there is a very small risk of death, which the healthcare professional will discuss with you when you are consented for the procedure

Unfortunately, not all biopsies are successful, and sometimes the sample taken is unsatisfactory. This may mean a repeat or alternative procedure becomes necessary. Despite these complications the procedure is generally safe and will be beneficial in ensuring that an accurate diagnosis of your condition is made.

## **When do I get the results?**

It usually takes at least a week for the laboratory to complete the initial tests needed on the tissue sample. The healthcare team will arrange for you to come back to the clinic or be telephoned with a result.

# **Bronchoscopy and EBUS (Endobronchial Ultrasound)**

A bronchoscopy is a test that allows the doctor to look into your windpipe and the air tubes of your lungs. The doctor passes a thin, flexible tube (a bronchoscope) through your nose or mouth and down into your airways. This allows the doctor to:

- See your windpipe (trachea) and airways (bronchi).
- Look for any abnormalities.
- Take photographs.
- Take a sample of your lung tissue (biopsy).
- Take a sample of your phlegm.

In addition to this, an EBUS test allows the doctors to take samples of the lymph glands near to your airways.

## **How do I prepare for a bronchoscopy/EBUS?**

You may have clear fluids (water) up to two hours before the procedure but must not eat for four hours before your bronchoscopy. You can take regular medications as normal with a small amount of water, up to two hours before the test.

If you take treatment for diabetes or blood-thinning medications, please inform your doctor or the endoscopy unit well in advance so you can be advised whether you need to stop taking these medications.

## **What happens when I arrive at the unit?**

You will meet a nurse who will look after you during your stay. You will be asked about your current medication and any allergies you have. The nurse will check your arrangements for getting home.

If you receive sedation, you will need to ensure that you have someone with you for 24 hours after the test.

You will be asked to sign a consent form giving your permission for the test to be undertaken. Before you sign this consent form it is important that you understand the reason for the test, the procedure itself and any potential risks involved. If you have any questions, please ask before signing the consent form. You will be offered a copy of the form for your own records and a copy will be kept in your medical notes.

It is important that you tell the doctor if:

- You are taking medication to thin the blood (such as aspirin, warfarin, clopidogrel or apixaban).
- You have known allergies.
- You've had a heart attack in the last six weeks (the test will sometimes need to be delayed).
- You suffer from asthma or chronic obstructive airways disease (COPD).

## **What will the bronchoscopy/EBUS involve?**

You will be taken into the examination room and made comfortable on a couch. You will be asked to remove false teeth and glasses.

A heart monitor and an oxygen monitor will be attached; this is to measure your heart rate and oxygen levels. A needle will be inserted into a vein in your arm. You will be given an injection which will reduce your need to cough and is likely to make you feel a little sleepy.

You will have a local anaesthetic spray or gel applied to your nose and/or throat to make it feel numb.

The doctor will then pass the thin tube down your nose or mouth and into the back of your throat. Further local anaesthetic will be sprayed onto your voice box through the tube. This is not painful, but you may cough.

There is plenty of space for oxygen to reach the lungs, and extra oxygen will be given through a thin tube in your nostril if needed. You will be able to breathe normally but will be asked not to talk during the test.

The whole test normally takes around 20-30 minutes for a bronchoscopy and around 60 minutes for an EBUS.

Following the sedation many patients do not remember anything about the test. This is normal and is an effect of the sedation medication.

## **What happens after the test?**

Because your throat has been numbed, it is important that you do not eat or drink anything until the anaesthetic has had time to wear off. This usually takes around an hour and a half. You will need to stay in hospital until your nurse is sure you are fit enough to go home.

When you get home, we advise that you rest for the remainder of the day.

You should be able to go back to work the following day. You need to make sure that a responsible adult with transport can take you home.

When you have had a sedative:

- It will stay in your system for a few hours and you should not drive for 24 hours.
- Don't operate machinery or drink alcohol for 24 hours.
- Don't make important decisions for 24 hours.
- If you live alone, you need to arrange for a responsible adult to stay the night with you. If this isn't possible, we will suggest you stay in hospital overnight.



## **Does the procedure have any side-effects?**

You may have a slight nosebleed, a short-lived fever or you may notice some blood in your phlegm after the test. This is normal and will settle within 24 hours. Your throat may be a little sore and you may have a hoarse voice, although this will settle within a day or two.

If you have any problems in the first 24 hours after you leave hospital, please contact:

York Endoscopy Unit on 01904 726691 or  
Scarborough Endoscopy Unit on 01723 385106.

If you have concerns more than 24 hours after the procedure call your GP.

## **Are there any risks in having this test?**

This is usually a safe test with no anticipated problems. However, there is always some risk with medical procedures, although major complications after a bronchoscopy/EBUS are rare.

The most serious, but infrequent risks are death (estimated at one in 5,000 cases), bleeding, chest pains, racing heartbeat (palpitations), difficulty in breathing and reactions to medications or local anaesthetic.

Following EBUS there is a very small risk of air or blood leaking into the centre of the chest. This is rare but if you experience a sudden onset of chest pain, shortness of breath or coughing up a lot of blood you should call 999 or go straight to A&E.

As with any medical procedure, there is a very small risk of death, which the healthcare professional will discuss with you when you are consented for the procedure

## **When will I get the results?**

You may be told on the day of the test what your airways look like and if anything abnormal was seen. Samples taken will take at least a week to be processed and for results to be available. If you need further tests or a follow-up clinic appointment your consultant or specialist nurse will ensure this is arranged for you.

## **What if I have any questions?**

The doctors and nurses are here to help you. If you have any questions at all, don't be afraid to ask.

If you are unable to keep your appointment or have questions, please contact the waiting list team on 01904 726689 or the York Endoscopy Unit on 01904 726694.

For Scarborough please call the consultant's secretary on 01723 342037.

# **Pleural aspiration**

This procedure may be recommended if you have fluid around your lung, known as a pleural effusion. Removing some of this fluid can help your breathing and enable your doctor to find out why it has occurred.

## **What happens before the test?**

There is no need to fast for this procedure, but you may wish to refrain from a heavy meal beforehand. The procedure is performed in the endoscopy unit at York Hospital. In Scarborough the medical team will let you know arrangements for the test.

When you arrive, the doctor will discuss the procedure with you, and you can ask any questions you may have.

## **How is this procedure carried out?**

It will be carried out by a doctor, often with an assistant. They will ask you to remove the top half of your clothing and wear a gown. They will insert a needle into a vein in your arm in case they need to give you any medication.

They will usually ask you to sit down facing away from them, leaning on a table. If this position is likely to be difficult or uncomfortable, please discuss it with your doctor or nurse.

They will clean your skin with antiseptic and may inject local anaesthetic to numb your skin. An ultrasound machine will be used to locate the fluid. The fluid will be removed using a needle and a syringe, before the needle is removed and a small dressing applied.

### **Diagnostic tap**

A small amount of fluid is removed (approximately 50ml) and sent to the laboratory for tests.

### **Therapeutic Tap**

If you have more fluid around your lung, we may remove up to 1500mls to improve your breathing. Some fluid will usually be sent to the laboratory for analysis.

### **What are the risks and complications in having this procedure done?**

We may not be able to access the fluid if there is not much or if it has formed into pockets. In this case, you can go home, and the doctor will explain the next steps.

If too much fluid is removed it can make you feel faint or give you a cough or chest discomfort. This can be avoided by not taking too much fluid off at once. If you feel unwell or uncomfortable during the procedure, please tell the doctor/nurse looking after you.

You may experience some discomfort and bruising from the needle site. This can be treated with paracetamol and usually doesn't last for more than a few hours. Occasionally infection can occur, though the risk of this is minimised by keeping the area and equipment sterile. The needle can damage organs including your lung, and the risk of this is reduced by using ultrasound. If the lung is damaged it can collapse (known as a pneumothorax) – sometimes this requires no treatment and will resolve by itself, but if the pneumothorax is large or making you feel unwell you may require a chest drain to re-inflate your lung. You will be admitted to hospital for a few days if this is the case.

## **What happens after the test?**

After the test is over, you may rest in a chair or bed. We may allow you to go home immediately or (if you have had a larger amount removed) we may need to do a chest x-ray, check your pulse, blood pressure and oxygen levels for around an hour before you go home.

## **When do I get my results?**

It will take at least a week for the initial results to come back and you will have a follow-up appointment made to discuss the next steps.

# **Pulmonary function tests (PFTs)**

## **What are Pulmonary Function Tests (PFTs)?**

Pulmonary Function Tests (or PFT's) use special medical equipment to accurately measure how your lungs work. They can help doctors to identify and manage any potential lung problems.

## **What happens during the PFTs?**

You will be asked to wear comfortable clothes and to report to the cardiorespiratory department. This is on the first floor of the hospital, near medical elective services (MES). The Physiologist performing the tests will discuss the tests with you when you arrive and answer any questions you may have.

Before your test, the Physiologist will ask questions to ensure it is safe to continue. This may include whether you have been unwell, had recent surgery, or any hospital admissions in the last six weeks.

During the PFT, you may be asked to breathe in and out deeply at different speeds, hold your breath for eight to 12 seconds, or to pant gently against a closed shutter for two seconds. The tests may require some exertion, but you will be given plenty of rest between attempts.

You may also be asked to walk as far as you can in six minutes. During this time, you will be able to rest, (stopping and starting again) as needed.

## **When do I get the results?**

Results will be sent to your consultant who will be able to explain these to you. Sometimes you will have PFTs just before a clinic appointment, in which case you will usually be given an envelope containing the results to give to your doctor.



# **Cardio-pulmonary Exercise Test (CPET)**

## **What is a Cardio-Pulmonary Exercise Test (CPET)?**

A Cardio-Pulmonary Exercise Test (CPET) is used to assess your overall fitness for further investigations or treatment, particularly surgery, if that is being considered.

## **What happens during a CPET?**

Stickers (electrodes) will be put on your chest to monitor your heart rate and rhythm. You may also have your blood pressure checked during the test and may have breathing exercises known as spirometry. Occasionally a blood test may be taken from the wrist or ear.

You will be encouraged to cycle on an exercise bike for as long as you can while your body's response to exercise is assessed. The appointment will usually last 45 minutes, but you will be exercising for no more than 15 minutes. The intensity of the cycling will be gradually increased during the test.

When you have completed the exercise, you'll be monitored while you rest and your body recovers.

## **When do I get the results?**

Results will be sent to your consultant who will be able to discuss these with you and explain the next steps.



## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Macmillan Lung Cancer Specialist Nurses on York  
01904 726956 or Scarborough 01723 342493 or email  
[yhs-tr.lungcnsteam@nhs.net](mailto:yhs-tr.lungcnsteam@nhs.net).

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email  
[yhs-tr.PatientExperienceTeam@nhs.net](mailto:yhs-tr.PatientExperienceTeam@nhs.net).

An answer phone is available out of hours.

# Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:

[www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/](http://www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/)

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