

Your Differential Lung Function Scan explained (NCHEV & NCHEQ)

Please read this patient information carefully as it
contains information on preparing for the scan

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Aim of the patient information

This patient information is for patients having a Differential Lung Function scan. It aims to tell you what a Differential Lung Function scan is and what will happen.

General information

A doctor has asked us to take pictures of your lungs. We will look at both the air flow and blood flow to your lungs. Your test will take place over two separate days, as indicated on your appointment letter.

As the test involves small amounts of radiation, we ask that you are **not** accompanied by children under 18 or anyone who may be pregnant. You may bring one adult with you to the department.

If the appointment clashes with another outpatient appointment or test, or you are unable to attend on this day, please contact the Nuclear Medicine department on the number provided as soon as possible. We can then reschedule the test and assign the appointment to another patient.

If you have mobility issues, are incontinent or claustrophobic please contact the department on the number provided.

Benefit and risks of the test

Everyone receives some radiation every day from the radioactivity in the air, food we eat and even from space. The amount of radiation in a nuclear medicine test is similar to your natural exposure over 9 months, so the risks associated with it are low.

The main benefit of the test is making the correct diagnosis, so you can get the treatment that is right for you. This benefit is far greater than the small risk from radiation.

If you have any concerns, please contact the department in advance or ask to speak to someone on the day of your scan.

Preparation

If you are pregnant or breast-feeding, you must inform the department as quickly as possible as special arrangements may have to be made.

Please bring a list of any medication that you are taking (your repeat prescription sheet if possible). If you are asthmatic, please bring your inhaler with you when you come to the department.

There is no special preparation required for this test. **Please eat and drink as normal.**

Please be aware that this test involves human based products (human albumin aggregate particles). Please contact the department as soon as possible if this is of concern.

What does the test involve?

There are two parts to this test. Sometimes only one part is performed due to the information your doctor requires.

Day 1

For the first part, you will be asked to breathe in a radioactive mist (see top two photos below). This allows us to look at the air supply to your lungs and there should be no ill effects from the mist. After breathing in the gas, you will be asked to lie or sit whilst we take pictures of your lungs with a Gamma Camera (see bottom two photos below). These pictures may take up to 20 minutes. Once these pictures have been taken, you will be free to leave the department.

Day 2

The second part of the test involves giving a small injection of a radioactive tracer into one of the veins in your hands or arms. This allows us to look at the blood flow in the lungs and there should be no ill effects from the injection. Once the injection is given, you will be asked to lie or sit whilst we take pictures again of the lungs with the Gamma Camera. These pictures may also take up to 20 minutes. After the pictures have been taken, you will be free to leave.





After the test

For the rest of the day, you must take extra care to wash your hands thoroughly after toilet use, sit down when you use the toilet and to flush the toilet twice. You must also continue to drink extra fluids and empty your bladder frequently. This will improve the clearance of the radiation from your body.

When the test is completed, the images will be reviewed, and a report will be available to the doctor who has requested the test.

Radiation information

If you would like to find out more about medical radiation, please access the following link:

<https://www.gov.uk/government/collections/medical-radiation-uses-dose-measurements-and-safety-advice>

The camera

The Gamma Camera that takes the pictures has an open design and the majority of patients complete the test without any discomfort.

Contact details

If you have any questions about any of this information, please contact the Nuclear Medicine Department on 01522 573103.

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www.accessable.co.uk/united-lincolnshire-hospitals-nhs-trust

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If you require this information in another language or alternative format, please email the Patient Information team at ulth.patient.information@nhs.net