

Pulmonary (Lung) Nodules

What is a Pulmonary Nodule?

Pulmonary (lung) nodule(s) are small 'spots' or areas of rounded shadowing in the lung, typically 3cm or smaller. They can be seen on a CT scan (Computer Tomography scan made up of many x-rays to create a 3D image) and sometimes on a chest x-ray. Lung nodule(s) do not usually give any symptoms.

Why do Pulmonary Nodules occur?

Pulmonary nodules are common. They are found in approximately 1 in 4 (25%) of older people who smoke or who have smoked in the past. People who have never smoked may also have pulmonary nodules.

Most pulmonary nodules are benign (non-cancerous) and may be due to scarring from previous lung infection.

Pulmonary nodules are very common in conditions like rheumatoid arthritis or in patient's with a history of previous infections like TB (tuberculosis).

In a small number of people, a pulmonary nodule could represent a very early lung cancer or occasionally a cancer that has spread from elsewhere in the body.

How are Pulmonary Nodules diagnosed?

Sometimes pulmonary nodule(s) are seen on a chest X-ray but mostly they are too small and are only visible on a CT scan.

They are often a chance finding, unrelated to the reason the CT scan was performed in the first place.

It is often not possible to know the cause of the pulmonary nodule(s) from the CT scan alone. They are often too small and are not easy to get a biopsy (procedure performed to obtain a piece of the pulmonary nodule for examination).



The best way is monitor them by repeating the CT scan after a time interval to see whether they grow or change in appearance. Benign (non-cancerous) nodules occasionally get bigger but mostly remain the same.

Malignant (cancerous) nodules will eventually grow but very slowly to begin with. This can be monitored by repeating the CT scan over months to years.

Due to very slow growth, repeating a scan too soon will not usually help show up this increase in size.

The interval between scan and total duration of monitoring is determined by the appearance of pulmonary nodule(s) and whether there has been any change on repeat CT scans.

If there is any change in shape or size of the pulmonary nodule then your chest consultant may organise further tests and you will be invited to attend clinic to discuss this further.

This process has been established by experts studying the growth of these nodules in large populations of patients having body scans.

What happens next?

Your CT scan will be looked at by a radiologist (X-Ray specialist) and then by your chest specialist. In some cases, your chest specialist will discuss your information at a team meeting with other specialist doctors and nurses.

If a repeat CT is required, it will be arranged as per nationally agreed guidelines. Usually the scan is performed either in 3 or 12 months time. Some pulmonary nodule(s) may not need a repeat scan at all.

You will be contacted by letter.

You may need to have several CT scans over a number of years. This will depend on:

- Your age
- Whether you smoke or have ever smoked
- Whether you have other known cancer

- Your general health
- Your other medical conditions
- Whether you have family history of lung cancer
- Your own wishes regarding further investigations.

You and your doctor (GP) will receive a letter explaining the results of your CT scan and whether a repeat scan is needed.

It is expected that you will receive this information within 4 weeks of your CT scan.

If the pulmonary nodule(s) remain stable for a recommended period of time then we will inform you and discharge you from the pulmonary nodule pathway.

If you have any of the following symptoms between your scans, then you should inform your doctor (GP) who may wish to contact your chest consultant for advice.

- Pain in your chest
- Shortness of breath
- Repeated chest infections
- Coughing up blood
- Unexplained weight loss.

If you have any concerns or questions about your condition please contact the **Lung Nurse Specialist on: 01302 642393.**

If the Lung Nurse Specialist is unable to answer, leave a message including your name on the answer phone.

The phone is open Monday to Friday 9am until 5pm. At all other times, messages can still be left.

Patient Advice & Liaison Service (PALS)

The team are available to help with any concerns, complaints or questions you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are:

Telephone: 01302 642764 or 0800 028 8059

Email: dbth.pals.dbh@nhs.net