

# Information about your CT Scan

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## What is a CT scan?

A CT scanner is a ring-shaped machine that produces high detail pictures of your body. These images might help to provide a diagnosis for your signs and symptoms and/or provide information to how treatment might be affecting your condition.

The CT scanner requires you to lie on a motorised table, which will move you in and out of the ring shaped machine whilst x-rays produce images. You might hear the x-ray machine inside whirling around - similar to the sound of a washing machine.

By lying still and by following the breathing instructions, very detailed images can be produced without blurring of the images.

For certain examinations, contrast media, often referred to as “x-ray dye”, is a chemical that may be needed to be injected. Your appointment letter will usually state “with contrast” if this is required.



## What is contrast media (x-ray dye) and what will I feel?

Contrast Media or “x-ray dye” is a chemical that is used to help us see your organs, blood vessels and any pathology within your body. Without it, when it is needed, the sensitivity for the detection of abnormality is reduced significantly.

Contrast Media is most often injected into a vein in the arm or back of the hand. To inject this, we would need to place a cannula into the vein.

When contrast is injected, you can often expect to feel a sudden warmth passing through your body. For some, the warmth is often felt in the bladder area giving a convincing sensation that you are urinating yourself when you are not. Some patients describe receiving a metallic taste in their mouth. These sensations disappear in seconds to minutes.

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Sometimes, we may need additional information and inform you if contrast is likely required.

## How long will the scan take?

Examination time varies between each scan, but once positioned on the scan table, scans can take as little as 4 minutes. You can expect to be within the CT scan room for an average of 15 minutes for most scan types and within the CT department for an hour.

## What are the risks?

Complications/risks are very rare and are largely outweighed by the vast information that can be provided to your doctor to aid in your diagnosis, find out how your treatment is going and/or help plan for surgery. It is important to note that many scans are performed without any adverse event.

## Radiation risk

Having the procedure will result in you receiving a dose of radiation. The dose and associated risk will vary depending on the examination performed. Your doctor has agreed that this procedure is the best examination for you compared with others and that the benefit of having it outweighs the risks from radiation. We are constantly exposed to radiation from the air we breathe, the food we eat, the ground and from space. This is known as background radiation and is associated with a cancer risk of around 1 in 10,000 per year.

## Contrast risk (x-ray dye)

Contrast is routinely used in many scans to help see abnormalities and demonstrate organs and blood vessels. Without it, when it is needed, the detection ability of abnormalities is greatly reduced.

Severe or life threatening allergic reactions to contrast are exceptionally rare. Skin rashes/hives/itching are more likely to happen, but are also very rare.

Risk is thought to increase if you are known to have had a single severe allergic reaction (like anaphylaxis) to medicines etc or have multiple allergic reactions to many drugs/allergens. Although this does not prohibit contrast injection – a balanced risk assessment against not having contrast and reducing sensitivity of a scan is needed.

We check to make sure your kidney function is of an adequate function for us to give contrast so that we do not add too much stress to a poorly functioning kidney. If we do not have a recent blood test to see this, you may receive a blood test form with your appointment letter. Rarely kidney function can reduce because of contrast – it is important to further reduce this risk by drinking plenty of water for at least two days after your scan.

Rarely, cannulas can move out of veins and can leak contrast into the skin layers (called extravasation) which can cause pain and swelling bruising and swelling – most often treated only with cold compression and managed with over-the-counter pain killers.

## Preparation required

### **Food**

Please do not eat anything for 2 hours prior to your CT scan when your abdomen is being scanned, or if you are having contrast.

### **Water**

If your abdomen is being scanned or if you are having contrast, please ensure you are adequately hydrated. Drink plenty of water on the day of the scan and at least a litre in the hour before the scan. Drinking 500ml of water in the minutes leading to the scan helps with seeing stomach and small intestines on the scan. The more water consumed, the more we can see. A well-hydrated body helps with finding veins should you be given contrast. You may keep visiting the toilet to empty your bladder if you need to, however, a full bladder helps us see more.

### **Clothing**

Please attend the department in loose fitting clothing with anything metallic removed (jewellery on the chest, abdomen and pelvis). Avoid wearing clothing with metal eyelets/buttons etc and if applicable avoid underwired bras to speed things up and avoid changing for your CT scan.

### **Medicines**

We do not advise you to stop taking any medications before your scan.

## After your examination

If you have had a contrast injection, we may require you to remain with us for 15 minutes with your cannula in place for us to monitor you, occasionally longer. Once the examination is complete you can get dressed and go home.

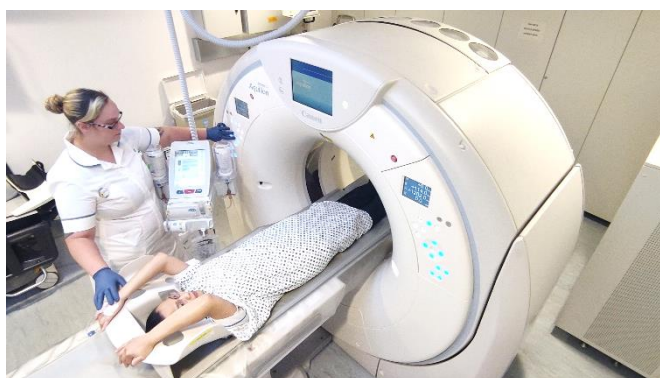
If you have any problems after the examination, please see your GP.

Outpatient scan results are usually on the system within 7 days. It may be that you will be awaiting an appointment with a specialist to explain the significance of the result to you and is often best you contact the referring department as to how and when you will receive your results, if they have not already explained this to you.

It is important to note that most scans are performed without any complications and many patients are able to return to their normal daily activities (including driving) immediately after the scan.

## I am claustrophobic – will I be okay?

CT is **not** a long dark tunnel, quite the opposite – it is a thin, but wide doughnut-shaped machine, where even if you are in the centre, you can see your way out. You are moved through the doughnut several times rather than being stationary. Most claustrophobic patients have no issues with a CT scanner. You are seen and heard by the radiographers at all times and are never truly alone.



## How long will I be in the department for?

We aim to have you prepared, scanned and monitored within 1 hour of your appointment time and we mostly achieve this. Owing to the unpredictable nature of the emergency attendances, urgent ward requests, examinations which are extended and people requiring longer preparation time (difficult veins etc), the time

you spend in the department can exceed an hour. We suggest, for time keeping purposes, you allocate 2 hours for this appointment. We endeavour to ensure you are scanned in the quickest time possible but maintain our legal obligation of ensuring no foreseeable harm is produced by delaying an urgent examination. We must always prioritise clinical need over non-urgent scans and appreciate your understanding in this.

### Contact information:

Appointment enquiries: 01205 445844 (Monday to Friday 9am to 5pm)

Alternatively, CT scan departments can be contacted:

Grantham 01476 464559

Lincoln 01522 573398

Boston 01205 445474



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