



What are the differences between medical scan types?

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Undergoing medical treatment and testing can be uncomfortable and frustrating. If you are making a claim for compensation as a result of an injury (for example, a [workers compensation](#) or a [motor vehicle accident](#) claim) you may be required to undergo medical assessments. It is often the case that you will be referred to various specialists for different kinds of medical imaging.

Different forms of medical imaging are better suited to aiding the diagnosis of various injuries and medical conditions. A simple broken leg may require no more than an x-ray whereas a head injury may require an additional MRI scan. In considering the type of scan for their patient, doctors will seek to balance the least intrusive and costly test to the level of detail required to provide an accurate diagnosis. Below we identify some common types of medical imaging.

X-Ray

Most people are familiar with *x-rays* and will have one during the course of their lives, whether for a broken bone or at the dentist. It is a relatively quick procedure that can be used to image bones and other dense material. Whilst this is of assistance, an x-ray may not capture finer details of an injury or medical condition and there is also the downside of being exposed to a small amount of radiation.

Ultrasound

Ultrasounds are generally quick and non-invasive without risk of exposure to radiation. This type of scan is frequently used to observe foetuses during pregnancy. The ultrasound works by using high-frequency soundwaves to produce a moving image that the doctor can view in real time. Although it is a relatively safe and painless procedure the images it produces are not as clear and detailed as other methods of imaging.

PET

PET is an acronym for *Positron-Emission Tomography* and involves the patient being injected with or swallowing radioactive material. This material can then be traced by the scanner to show images of bones and organs as the material travels through the body. PET scanning is used for a wide variety of conditions, however does involve exposure to radiation. A PET scan is often used to detect and monitor cancer and cardiovascular diseases.

MRI

Magnetic Resonance Imaging uses a magnetic field and radio waves to show detailed images of organs, bones, ligaments and soft tissues. This means MRI scans provide a greater amount of detail and are useful in diagnosing a wide range of conditions such as cancer, soft tissue injuries, issues with internal organs or spinal injury. Unlike an x-ray, an MRI scan requires the patient to lie still on a table which then slides into a cylinder that performs the scan. It is recommended that you inform your doctor if you are pregnant, have a pacemaker or any other metal object in your body before having the MRI.

CT

A *Computed Tomography* scan uses multiple x-rays to produce cross-sectional layers of the body. This provides a more three dimensional view of the patient's body compared to a simple x-ray. Although a CT scan is quick and provides more detail than an x-ray, it also provides an increased amount of exposure to radiation. CT scans are often used to diagnose blood clots, cancer, internal bleeding and more complex images of broken bones.

Medical examinations and imaging are important tools in proving personal injury or workers compensation claims. If you have suffered an injury and wish to investigate the possibility of a claim for compensation, you can get in touch directly with today's blog writer.

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