

# Medical Imaging for patients who are pregnant or planning to get pregnant

## Patient Information Sheet

### Information for Patient?

Your doctor (or referring practitioner) has requested an imaging test that uses ionising radiation, which is a type of energy released by atoms in the form of electromagnetic waves or particles (as opposed to ultrasound which uses sound waves).

Our technical staff will ask you about being pregnant or the possibility of being pregnant, before you proceed with your imaging test. They will ask about your last monthly period (LMP), any recent negative results of a pregnancy test if you are trying to get pregnant and talk through your specific risks.

The information below will inform you of any risks that may be associated with your imaging today. Should you have any further questions, please ask before undertaking your scan.

### Ionising Radiation

People are naturally exposed to ionising radiation daily, such as from rocks/soil, water and vegetation, but also from flight travel, skiing or living at high altitude. Likewise, when pregnant a baby is also exposed to these same naturally occurring factors with no apparent negative consequences.

Very high doses of ionising radiation have been shown to cause genetic defects and increase the lifetime risk of cancer (seen in population studies from Hiroshima and Nagasaki who survived the exposure of radiation from nuclear weapons). Experimental studies on plants and animals suggest that lower doses of ionising radiation can cause genetic defects, but it has not been identified as a cause of such effects in humans.

Most diagnostic x-rays and nuclear medicine scans use very low levels of ionising radiation and therefore are unlikely to be of significance during pregnancy. However, the desire should always be to minimise any additional radiation exposure. The exact dose received by the baby during a scan is dependent on the area of the body being imaged and other technical factors. If the scan cannot be deferred until after the end of pregnancy, there are additional precautionary technical measures that can be taken to reduce the radiation dose to the baby, such as limiting the area scanned to avoid the baby as best as possible.

Of note, we have pregnant staff members who work with ionising radiation on a daily basis throughout their pregnancy.

Therefore, it is extremely unlikely that your unborn baby will be harmed by the ionising radiation but if you are pregnant or are currently trying to get pregnant and still have concerns, please speak to technical staff who can liaise with the Radiology Doctor to discuss your concerns in more detail.

**For more detailed information on pregnancy and radiation visit**

<https://www.insideradiology.com.au/radiation-risk-preg/>