

Exposure	Dose (mSv-unit to measure small doses of radiation)
100g of Brazil nuts	0.01mSv
Transatlantic Flight	0.08mSv
Average annual dose from background radiation	2.7mSv
CT scan of whole spine	10mSv
Annual exposure limit for nuclear industry employees	20mSv
Nuclear Medicine Bone scan	3mSv



RADIATION

Everyone is exposed to natural background radiation daily which is around **2.7mSv** per year

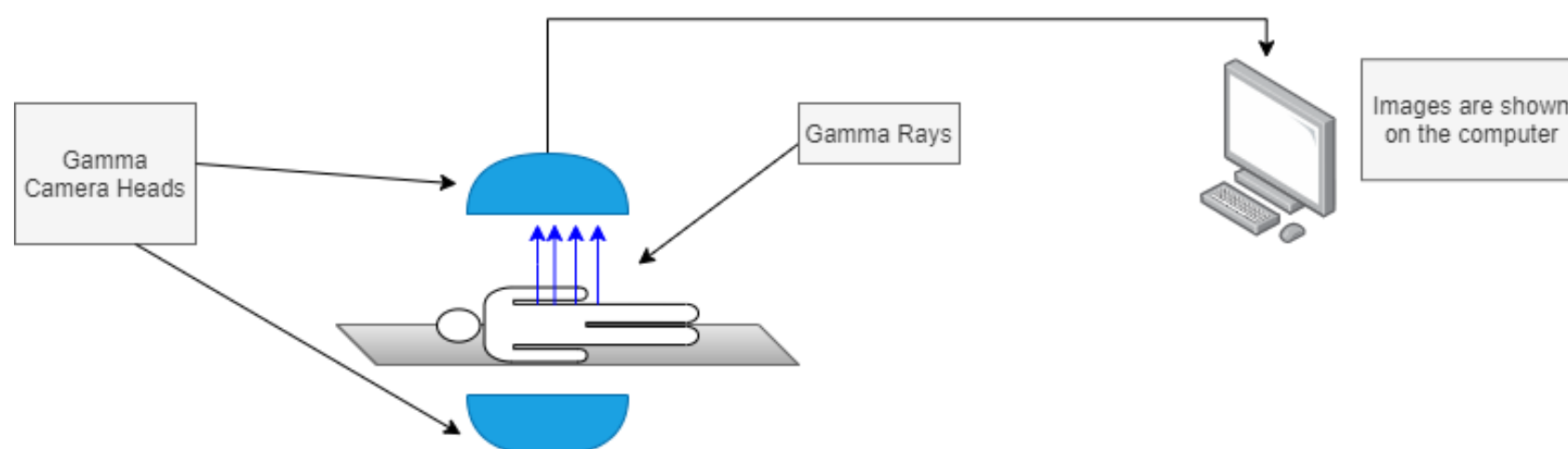


Gamma Camera

- ♦ The gamma camera is what is used to image patients
- ♦ The patient is injected with radiation such as **Tc-99m** which has a half life of **6 hours**.
- ♦ This means that it does not stay in your system for very long (**around 24 hours**)
- ♦ The gamma camera detects the **gamma rays** from the injection and converts them into **light pulses** so that different parts of the body can be seen and their physiological action.

Types of Scans

- ♦ Nuclear medicine can image various parts of the body and show their function
- ♦ Some of the most common ones are **Bone scans**, **Lung scans**, **Renal scans**, **Brain scans** and **Gastric Emptying scans**
- ♦ **Pregnant women** and **breast-feeding mothers** can also come for lung scans which gives them **a lower dose than a CT of the lungs**
- ♦ It is an area of science which is expanding with new cameras called PET cameras.



More Information

If you are worried or anxious about your nuclear medicine scan, you should contact the department and they will be able to answer any questions or concerns you may have