

Radiation

The Gray implies that 1 Joule of energy is absorbed per kilogram mass. The Sievert is the dose equivalent of this.

A **Deterministic Effect** is the direct dose dependant on tissue

A **Stochastic Effect** is the increased statistical risk of disease due to the radiation.

The radiation dose encountered with common investigations include:

- CXR – 0.02 mSv
- KUB XR – 0.52 mSV
- CT KUB – 6 mSv
- CT Urogram – 18 mSv
- Bone Scan – 4 mSv
- MAG 3 Renogram – 1 mSv
- DMSA – 1 mSv

Contrast is administered orally or intravenously. The former exhibits a porto-venous phase before being excreted by the kidney. The latter exhibits a venous then arterial phase before cortico-medullary handling in the kidney, Following this, there is a pyelogram and urogram phase.