


# CT Imaging Procedures: Background Dose Equivalents

Diagnostic procedure ( <i>with effective dose - mSv</i> )	Background equivalent	Indicative risk of fatal cancer	Risk terminology
 <b>Eating a banana</b> (0.0001mSv)	20 mins	1 in a few million	Negligible risk
Chest, single PA (0.014mSv)	<2.5 days	1 in 1,400,000	Negligible risk
<b>Flight to Hong Kong</b> (0.05mSv)	<8.5 days	1 in 400,000	Minimal risk
Abdomen x-ray (0.43mSv)	2.4 months	1 in 46,500	Very low risk
CT Head (1.4mSv)	8 months	1 in 14,000	Very low risk
<b>UK average annual natural background dose</b> (2.2mSv)	1 year	1 in 9,000	Low risk
CT Abdomen (5.6mSv)	2.5 years	1 in 3,600	Low risk
CT Chest (6.6mSv)	3 years	1 in 3,000	Low risk
CT Abdomen + Pelvis (6.7mSv)	3 years	1 in 3,000	Low risk
CT Chest + Abdomen + Pelvis (10mSv)	4.5 years	1 in 2,000	Low risk

The above data is for imaging procedures for patients 16 TO 69 YEARS OLD.

For PEDIATRIC patients, risks associated with x-ray imaging procedures are *increased* by a factor of TWO

For patients aged 70 OR OVER risks associated with x-ray imaging procedures are *reduced* by a factor of FIVE

Data for effective dose and risk terminology based on HPA data (HPA-CRCE-028 - Radiation Risks from Medical X-Ray Examinations as a Function of the Age and Sex of the Patient, B F Wall et al, 2011). Risk data from [Patient dose information: guidance - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

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