




Effective radiation dose in adults

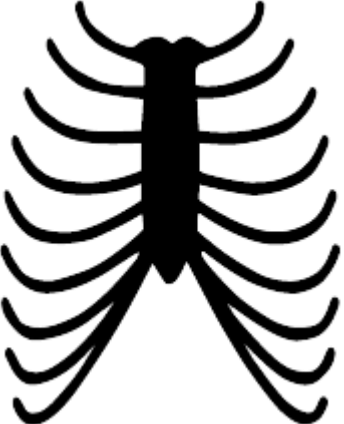
Here are some effective radiation doses in adults for several radiology procedures described. These values can vary greatly, depending on the size of the patient and the type of imaging technology being used. Manufacturers of imaging technology continue to make improvements towards reducing radiation exposure while maintaining image quality. 1mSv = 100 mrem


ABDOMINAL REGION	Procedure	Approximate effective radiation dose
	Computed Tomography (CT)–Abdomen and Pelvis	7.7 mSv
	Computed Tomography (CT)–Abdomen and Pelvis, repeated with and without contrast material	15.4 mSv
	Computed Tomography (CT)–Colonography	6 mSv
	Intravenous Urography (IVU)	3 mSv
	Barium Enema (Lower GI X-ray)	6 mSv
	Upper GI Study with Barium	6 mSv


BONE	Procedure	Approximate effective radiation dose
	Lumbar Spine	1.4 mSv
	Extremity (hand, foot, etc.) X-ray	Less than 0.001 mSv

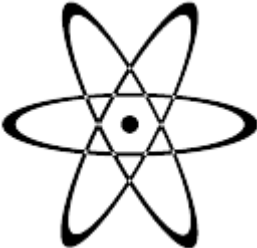
CENTRAL NERVOUS SYSTEM	Procedure	Approximate effective radiation dose
	Computed Tomography (CT)–Brain	1.6 mSv


	Computed Tomography (CT)–Brain, repeated with and without contrast material	3.2 mSv
	Computed Tomography (CT)–Head and Neck	1.2 mSv
	Computed Tomography (CT)–Spine	8.8 mSv


CHEST	Procedure	Approximate effective radiation dose
	Computed Tomography (CT)–Chest	6.1 mSv
	Computed Tomography (CT)–Lung Cancer Screening	1.5 mSv
	Chest X-ray	0.1 mSv

DENTAL	Procedure	Approximate effective radiation dose
	Dental X-ray	0.005 mSv
	Panoramic X-ray	0.025 mSv
	Cone Beam CT	0.18 mSv

HEART	Procedure	Approximate effective radiation dose
	Coronary Computed Tomography Angiography (CTA)	8.7 mSv
	Cardiac CT for Calcium Scoring	1.7 mSv
	Non-Cardiac Computed Tomography Angiography (CTA)	5.1 mSv

NUCLEAR MEDICINE 	Procedure	Approximate effective radiation dose
	Positron Emission Tomography-Computed Tomography (PET/CT) Whole body protocol	22.7 mSv

MEN'S IMAGING 	Procedure	Approximate effective radiation dose
	Bone Densitometry (DEXA)	0.001 mSv

WOMEN'S IMAGING 	Procedure	Approximate effective radiation dose
	Bone Densitometry (DEXA)	0.001 mSv
	Screening Digital Mammography	0.21 mSv
	Screening Digital Breast Tomosynthesis (3D Mammogram)	0.27 mSv