

X-ray Dose from Different X-ray Machines

Machine	Dose in mSv	Background Equivalent	Additional Lifetime Risk of fatal cancer
<i>Extra-oral</i>			
Cone beam CT			
Large FOV	6.2	18 hours	negligible
Small FOV	3.1*	9 hours	negligible
Digital Panoramic	0.5	1.7 hours	negligible
Medical CT (head)	210**	8 months	very low
<i>Intra-oral</i>			
FMS (film)	88 ⁺	10 days	very, very low
FMS (solid-state)	8.0	24 hours	negligible
FMS (film) with Tru-Align	5.0 ⁺	17 hours	negligible
FMS (solid-state) with Tru-Align	0.5	1.7 hours	negligible
BW (film)	0.005**	50 minutes	negligible
BW (film) with Tru-Align	0.002	20 minutes	negligible
Average Annual Background Radiation	360mSv	365 days	low

1 mrem (mSv) = 10 microSv

*Source: NCRP report #160, 2009

**Source: American College of Radiology (ACR) and Radiological Society of North America (RSNA) and

**Source: *United Nations Scientific Committee on the Effects of Atomic Radiation. Sources and effects of ionizing radiation, Vol. 1: Sources.* New York, NY: United Nations Publishing; 2000.

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The message – solid-state detectors with Tru-Align cut your patient's exposure from 88mSv to 0.5mSv Or **from 10 days** of background **to only 1.7 hours!**