

# Radiation we are exposed to every day

FACTORS	COMMON SOURCES OF RADIATION	YOUR ANNUAL DOSE (mREMs)
Where you live	Cosmic radiation at sea level	<u>26</u>
	Elevation (in feet): Add the appropriate no. of mrems for your elevation 1000 - add 2      4000 - add 15      7000 - add 40 2000 - add 5      5000 - add 21      8000 - add 53 3000 - add 9      6000 - add 26      9000 - add 70 <i>Elevation of some U.S. cities (in feet): Charlotte 700, Atlanta 1050, Chicago 600, Denver 5,000, Tucson 2,500. (Coastal cities are assumed to be zero, or at sea level.)</i>	_____
Ground	Soil, rocks, and minerals (natural isotopes)	_____
	If you live in a state that borders the Gulf or Atlantic Coasts – add 16	_____
	If you live in the Colorado Plateau area (around Denver) – add 63 If you live anywhere else in the continental U.S. – add 30	_____
House construction	Stone, adobe, concrete, or masonry (brick or stucco) building – add 7	_____
	Radon gas - U.S. average	<u>200</u>
What you eat, drink, and breathe	Food	_____
	Water - U.S. average	<u>24</u>
	Air	_____
	Fallout from air testing of nuclear weapons	<u>4</u>
Medical	No. of chest x-rays _____ x 10	_____
	No. of lower intestinal tract x-rays _____ x 500	_____
	No. of radiopharmaceutical examinations (brain scans, thyroid uptakes, etc.) _____ x 300	_____
	Number of extremity (arms, legs) x-rays _____ x 20	_____
	(Note: Average dose to U.S. population: 92 mrems)	_____
Dental	No. of bitewing series _____ x 40	_____
	No. of panorex x-rays (full mouth series) _____ x 500	_____
Travel	Jet plane – for each hour in the air - add 0.5	_____
Household	Luminous clocks - for each clock add 9	_____
	Luminous wristwatch – add 2	_____
	TV viewing and computer CRT monitor for each hour per day (average) _____ x 0.15	_____
	No. of Smoke detectors _____ x 0.002	_____
	Sleep with spouse and/or siblings _____ x 0.1	_____
How close you live to a nuclear power plant	At site boundry: average no. of hours per day _____ x 0.2	_____
	One mile away: average no. of hours per day _____ x 0.02	_____
	Five miles away: average no. of hours per day _____ x 0.002	_____
	More than 5 miles away: none	_____
<i>(Note: Maximum allowable dose determined by "as low as reasonably achievable" (ALARA) criteria established by the U.S. Nuclear Regulatory Commission. Experience shows that your actual dose is substantially less than these limits.)</i>		
<b>TOTAL</b>		_____

*Primary Source: Revised from earlier editions based on the "BEIR Report III" - National Academy of Sciences, Committee on Biological Effects of ionizing Radiation. "The Effects on Population of Exposure to Low-level Radiation," National Academy of Sciences, Washington, DC, 1980.*