



## Radiation Protection

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**Understanding Radiation:** [Ionizing & Non-Ionizing Radiation](#) [Health Effects](#) [Radiation Protection Basics](#)

# Calculate Your Radiation Dose

### Health Effects

#### Directions

1. Enter values or select entries where options are provided. (Some entries for the annual dose calculator are already filled in.)
2. Click the "calculate dose" button.

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Source	Your Average Annual Dose (mrem)
Cosmic radiation at sea level (from outer space)	26
What is the elevation (in feet) of your town?	up to 1000 (2 mrem) <input type="text"/>
<b>Terrestrial (from the ground):</b>	
What region of the US do you live in?	Gulf Coast (23 mrem) <input type="text"/>
<b>Internal radiation (in your body):</b>	
From food and water, (e.g., potassium)	40
From air, (radon)	200
Do you wear a plutonium powered pacemaker?	No (0 mrem) <input type="text"/>
Do you have porcelain crowns or false teeth?	No (0 mrem) <input type="text"/>
<b>Travel Related Sources:</b>	
Add 1 for each 1000 miles traveled by jet this year:	0 <input type="text"/>
Are X-ray luggage inspection machines used at your airport?	Yes (.002 mrem) <input type="text"/>
Do you use gas lantern mantles when camping?	No (0 mrem) <input type="text"/>
<b>Miscellaneous Sources:</b>	
Weapons test fallout	1

House construction: Do you live in a stone, brick, or concrete building?	<a href="http://www.epa.gov/radiation/understand/calculate.html">http://www.epa.gov/radiation/understand/calculate.html</a> No (0 mrem) <input type="checkbox"/>
Do you wear a luminous wristwatch (LCD)?	No (0 mrem) <input type="checkbox"/>
Do you watch TV?	Yes (1 mrem) <input type="checkbox"/>
Do you use a computer terminal?	Yes (.1 mrem) <input type="checkbox"/>
Do you have a smoke detector in your home?	Yes (.008 mrem) <input type="checkbox"/>
How many medical x-rays do you receive per year? (40 mrem each)	<input type="text" value="0"/>
How many nuclear medical procedures do you receive per year? (14 mrem each)	<input type="text" value="0"/>
Do you live within 50 miles of a nuclear power plant?	Yes (.009 mrem) <input type="checkbox"/>
Do you live within 50 miles of a coal fired power plant?	Yes (.03 mrem) <input type="checkbox"/>

**TOTAL YEARLY DOSE (in mrem)****Notes**

The amount of radiation exposure is usually expressed in a unit called millirem (mrem). In the United States, the average person is exposed to an effective dose equivalent of approximately 620 mrem (whole-body exposure) per year from all sources (NCRP Report No.160).

The dose calculator is based on the American Nuclear Society's brochure, "Personal Radiation Dose Chart". The primary sources of information we relied on are the National Council on Radiation Protection and Measurements Reports #92-#95, and #100. Please remember that the values used in the calculator are general averages and do not provide precise individual dose calculations.

[National Council on Radiation Protection and Measurements](#)

CRP's mission is to formulate and widely disseminate information, guidance and recommendations on radiation protection and measurements which represent the consensus of leading scientific thinking.

Special thanks to UT-ANS group for providing the CGI script that was used to construct this yearly dose calculator web page.

[Radiation: Risk and Realities \(PDF\)](#) (16 pp, 1.17MB [\[about pdf format\]](#)) [EPA 402-k-07-006]

This booklet describes the risks and benefits of ionizing radiation.

[Ionizing Radiation Fact Book \(PDF\)](#) (22 pp, 1.12MB [\[about pdf format\]](#)) [EPA 402-F-06-061]

This booklet provides basic information about ionizing radiation and discusses health effects of radiation exposure.

[Understanding Radiation in Your Life, Your World](#)

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