

DOE LM | RADIATION EXPOSURE

COMMON ANNUAL EXPOSURES



Approx 21 mrem
from land



Approx 29 mrem
from internal



Approx 33 mrem
from space



Approx 228 mrem
from radon

Average daily dose in the U.S.
from naturally occurring radiation.

Full body exposure for any duration
past this level is harmful and potentially lethal.



DOE limit for
remediation of land
(Annual dose)

≤25
mrem



From all natural
sources
(Annual dose)

310
mrem



From all natural and
human-made sources
(Annual dose)

620
mrem

5,000
mrem



DOE radiation worker
dose limit
(Annual dose)

What is mrem?

The unit of **millirem (mrem)** is a measure of the dose or quantity of radiation energy that could be deposited in our bodies.



LM Sites

(No additional
radiation exposure
above the region's
natural background.)



Dental
X-ray

(Dose per examination)

10
mrem



Chest
X-ray

(Dose per examination)



Flight
Crews

(Annual increase in
cosmic radiation due
to high altitude)

100
mrem



PET
Scan

(Dose per examination)

1,000
mrem



CT
Scan

(Dose per examination)

10,000
mrem



Acute radiation sickness

At 100,000 mrem you will begin
feeling nauseous.

100,000
mrem



Lethal full
body dose

1,000,000
mrem



Cancer
radiotherapy

(Dose only at the treated region)

5,000,000
mrem

Graph is not to scale.

Did you know?

Radiation is around us, all the time, from natural and human-made sources. While radiation is always present, workers and visitors at Legacy Management sites aren't exposed to any measurable radiation above natural background levels.

www.youtube.com/watch?v=FrVUJ2c_Rwc



Information on this graphic came from the U.S. Department of Energy, U.S. Nuclear Regulatory Commission, National Council on Radiation Protections and Measurements, National Academy of Sciences, and Journal of the Health Physics Society.



U.S. DEPARTMENT
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