

RADIATION DOSAGE LEVELS

Below is a breakdown of various radiation exposure levels (measured in roentgens per minute) and their corresponding effects on human health:

NORMAL: ≤ 0.01 R/MIN

This level of radiation is considered background radiation, which is naturally present in our environment. It's harmless and typical of everyday life (approximately 0.005–0.01 R/min).

NORMAL FOR HOSPITAL WORKERS: > 0.01 TO 0.05 R/MIN

This is a safe and controlled exposure level typically encountered by medical professionals, especially those who work with radiology equipment on a daily basis.

ACCEPTABLE FOR NUCLEAR PLANT WORKERS: > 0.05 TO 0.1 R/MIN

Considered controlled occupational exposure, this level is within the safety limits set for workers in the nuclear industry. It is monitored to prevent long-term health risks.

WARNING ZONE: > 0.1 TO 1 R/MIN

Exposure within this range may start to affect sensitive organs, particularly the thyroid, if the contact is prolonged. Protective measures are advised.

DANGEROUS LEVEL: > 1 TO 10 R/MIN

This dose can lead to acute radiation sickness, with serious risks to internal organs and especially the thyroid gland. Immediate medical attention and evacuation from the source are critical.

LETHAL: > 10 R/MIN

At this level, exposure poses an immediate and severe threat to life. Multiple organ failure and death are highly likely.