

## Radiation

### NO SAFE DOSE

^There is no safe level of exposure and there is no dose of radiation so low that the risk of a malignancy is zero~--Dr. Karl Z. Morgan, dubbed the father of Health Physics.1

^ there is no safe level of exposure to ionising radiation, and the search for quantifying such a safe level is in vain.~`Rosalie Bertell, PhD.2

In 1940, several members of the US Committee on X-Ray and Radium Protection ^proposed that the [radiation exposure] standard be lowered by a factor of five in response to the accumulating evidence that ANY amount of radiation, no matter how small, can cause genetic damage, injuring future generations.~ Gioacchino Failla argued against the lowering of the standards saying that ^if genetic damage were to be a consideration for standard-setters, then logically no radiation exposure should be allowed.~3

^ the human epidemiological evidence establishes by any reasonable standard of proof that there is no safe dose or dose-rate the safe-dose hypothesis is not merely implausible it is disproven.~ Dr. J.W. Gofman 4

^One thing we should take from this (1991 study of Oak Ridge weapons workers by Steve Wing, et al.) is that there isn't any safe level of radiation exposure ~ Dr. Carl Shy 5.

^The reanalysis (of Hanford worker data) provides no support for the idea that there is reduced cancer effectiveness of radiation at low dose levels ~ Drs. G.W. Kneale and A. Stewart 6.

^There is evidence that single tracks of all types of ionizing radiation can induce a variety of damage including DNA double-strand breaks which are believed to be critical lesions in radiation exposure. There is also a body of experimental evidence that argues against an error-free DNA repair system operating at low doses of ionizing radiation that might result in a dose threshold for the induction of gene and chromosomal mutations.~ MP Little and CR Muirhead.7

^An important feature of alpha irradiation is that, no matter how low the total dose to the whole body, a substantial dose of radiation (approx. .5 Gy) is delivered to an individual cell if it is traversed by a single alpha particle.~ E Wright 8.

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