

Risks of Health Effects of Radiation

Risks

- The magnitude of the influence of damage
- The possibility of any damage (probability)
- The combination of the magnitude of the influence and the possibility (probability)

Quantitatively expressed probability, not focused on the actual existence of damage

In particular, when considering stochastic effects of radiation,

Risks =

The probability (of contracting cancer or dying of cancer)

Having risks ~~≠~~ (Surely) being subject to damage

The term "risk" generally means "dangerousness" or "degree of hazard." However, more strictly, the term is used to refer to "the magnitude of the influence of damage," "the possibility of any damage (probability)," or "the combination of the magnitude of the influence and the possibility (probability)." The focus is not on "whether or not there are any risks" but on "to what extent or by how many times risks increase."

On the other hand, what causes damage is called "hazard." It is important to clearly distinguish hazard information on the existence or non-existence of hazards and risk information on the degree and probability of damage, and properly communicate and utilize these two types of information.

When considering health effects of radiation, in particular, stochastic effects of radiation, it is common to use the term "risk" in the sense of "the probability (of contracting cancer or dying of cancer)."

In this case, it should be noted that "having risks" is not equal to "(surely) being subject to damage."

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