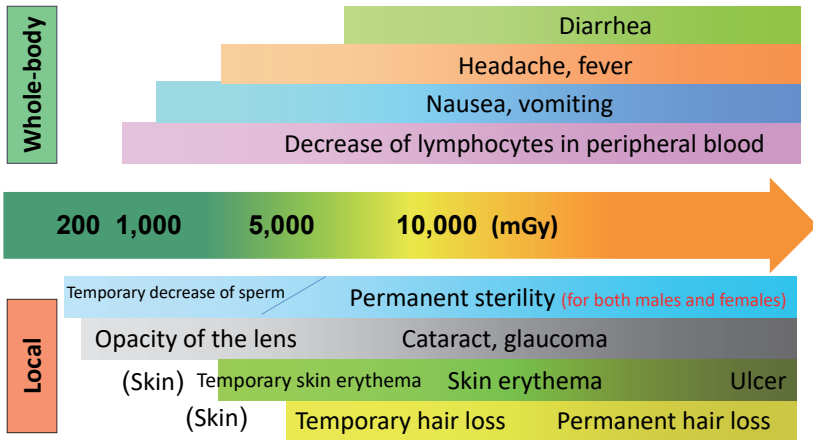


Whole-body Exposure and Local Exposure



Source: Rearranged based on the report of the Health Management Study Committee of the Nuclear Safety Commission (2000), etc

Radiation exposure at levels exceeding 100 mGy at one time may cause effects on the human body due to cell deaths. Organs highly sensitive to radiation are more likely to be affected with a small amount of radiation.

As the testes in which cells are dividing actively are highly sensitive to radiation, even low doses of radiation at the levels of 100 to 150 mGy temporarily decrease the number of sperm and cause transient sterility. Bone marrow is also highly sensitive to radiation and lymphocytes in blood may decrease due to exposure to radiation even less than 1,000 mGy (= 1 Gy). However, these symptoms naturally heal.

On the other hand, radiation exposure at levels exceeding 2,000 mGy (= 2 Gy) at one time often causes clinical symptoms that require proper treatment.

In the case of local exposure, disorders appear in the exposed organs.
(Related to p.82 of Vol. 1, "Damage and Repair of DNA")

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