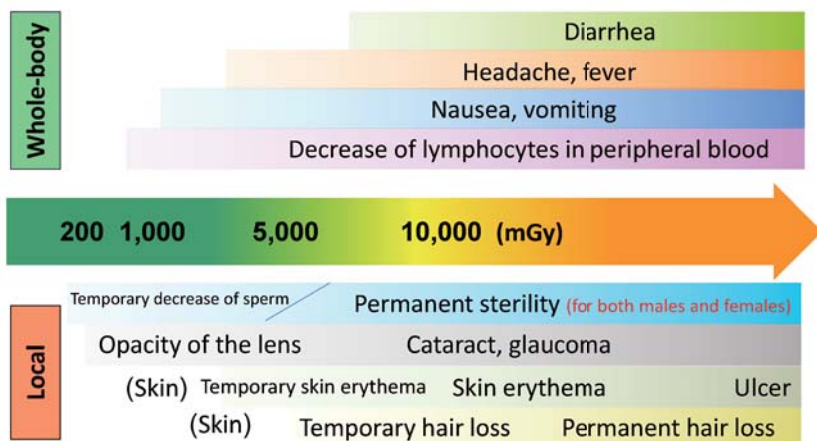


## Whole-body Exposure and Local Exposure



Source: Prepared 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 effects are naturally subdued.

On the other hand, clinical symptoms may appear that require clinical care after exposure to radiation of more than 2,000 mGy at one time.

In the case of local exposure, disorders appear in the exposed organs.  
(Related to p.88 of Vol. 1, "Damage and Repair of DNA")

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