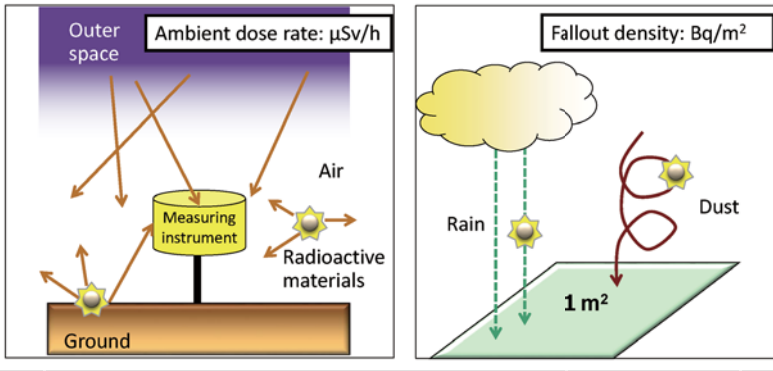


Measurement of Environmental Radiation and Radioactivity

- **Ambient dose rate** shows measured amount of γ -rays in the air. Indicated in microsieverts per hour ($\mu\text{Sv/h}$)
- **Fallout density** is the amount of radioactive materials that have deposited (or descended) per unit area in a certain period of time. e.g., becquerels per squared meter (Bq/m^2)



The ambient dose rate is obtained by measuring γ -ray doses in the air, and is indicated in microsieverts per hour. γ -rays from radioactive materials suspended in the air and γ -rays from radioactive materials fallen on the ground are both detected. The measured value is not limited to the amount of radiation derived from accidents. Major natural radiation is that from the ground and cosmic rays.

Normally, a measuring instrument is placed at a height of about 1 m from the ground, because most important internal organs are located at this height in the case of an adult. There are cases where a measurement instrument is placed at a height of 50 cm from the ground in places where mainly children spend time, such as schools and kindergartens.

The amount of radioactivity in fallout is expressed as the amount of radioactive materials fallen per unit area. Generally, such amount is expressed as a numerical value per day or month for each kind of radioactive material.

Included in this reference material on March 31, 2013

Updated on March 31, 2019