Dose Rate Unit

The unit for the equivalent dose per time unit is the **sievert per time unit.**

Units used most often are one millionth of a sievert per hour = microsievert/hour (µSv/hr) and one thousandth of a sievert per year = millisievert/year (mSv/yr).

For comparison:
A dose rate of 1 mSv/yr from technical sources is considered safe for the general public according to recommendations by the International Commission on Radiation Protection (ICRP).

The dose rate from natural radioactivity is in the range of 1.5 to 5 mSv/yr (and can be much higher in certain regions) or about 0.2 to 0.6 µSv/hr.

For professionals – those who are exposed to radiation from technical sources and are under dose surveillance, e.g. medical personnel or workers in a nuclear installation wearing a personal dosimeter – a whole-body dose rate of 20 mSv/yr or about 2 µSv/hr is considered safe.

If only certain parts of the body such as the skin, the hands or the feet are exposed, 500 mSv/yr is considered safe.