

**Radiation Measurement Units-International (SI) System**

**Activity 1 curie = 37 billion disintegrations per second.**

<b>The Curie (Ci) is replaced by Becquerel (Bq)</b>	<b>The Becquerel (Bq) is replaced by the Curie (Ci)</b>
1 kilocurie(kCi) = 37 terabecquerel (TBq)	1 terabecquerel (TBq) ~27 curie (Ci)
1 curie (Ci) = 37 gigabecquerel (GBq)	1 gigabecquerel (GBq) ~ 27 millicurie (mCi)
1 millicurie (mCi) = 37 megabecquerel (MBq)	1 megabecquerel (MBq) ~ 27 millacurie (mCi)
1 microcurie ( $\mu$ Ci) = 27 kilobecquerel (kBq)	1 kilobecquerel (kBq) ~ 27 nanocurie (nCi)
1 nanocurie (nCi) = 37 becquelel (Bq)	1 becquerel (Bq) ~ 27 picocurie (pCi)
1 picocurie (pCi) = 37 millibecquerel (mBq)	* 1Bq = 1s <sup>-1</sup>

**r**adiation adsorbed dose, A dose of 1 rad means the adsorbtion of 100 ergs of radiation energy per gram of

<b>The rad (rad) is replaced by the gray (Gy)</b>	<b>The gray (GY) replaced the rad (rad)</b>
1 kilorad (krad) =10 gray (Gy)	1 gray (Gy) = 100 rad (rad)
1 rad (rad) = 10 milligray (mGy)	1 milligray (mGy) = 100 millirad (mrad)
1 millirad (mrad) = 10 microgray ( $\mu$ Gy)	1 microgray ( $\mu$ Gy) = 100 microrad ( $\mu$ rad)
1 microrad ( $\mu$ rad) = 10 nanogray (nGy)	1 nanogray (nGy) = 100 nanorad (nrad)

**A unit of exposure to ionizing radiation.**

*The amount of gamma or x-rays required to produce ions carrying 1 electrostatic unit of electrical charge (either positive or negative) in 1 cc of dry air under standard conditions.*

<b>The roentgen (R) is replaced by coulomb/kg (C/kg)</b>	<b>Coulomb/kg replaces the roentgen (R)</b>
1 kiloroentgen(kR) ~ 258 millicoulomb/kg (mC/kg)	1 coulomb/kg (C/kg) ~ 3876 roentgen (R)
1 roentgen (R) ~ 258 microcoulomb/kg ( $\mu$ C/kg)	1 millicoulomb/kg mC/kg ~ 3876 milliroentgen (mR)
1 milliroentgen (mR) ~ 258 nanocoulomb/kg (nC/kg)	1 microcoulomb/kg ( $\mu$ C/kg) ~ 3876 microroentgen ( $\mu$ R)
1 microroentgen ( $\mu$ R) ~ 258 picocoulomb/kg (pC/kg)	1 nanocoulomb/kg (nC/kg) ~ 3876 nanoroentgen/kg (nR/kg)

**roentgen equivalent man**

<b>The rem (rem) is replaced by the sievert (Sv)</b>	<b>The Sievert (Sv) replaces the rem (rem)</b>
1 kilorem (krem) = 10 sievert (Sv)	1 sievert (Sv) = 100 rem (rem)
1 rem (rem) = 10 millisievert (mSv)	1 millisievert (mSv) = 100 millirem (mrem)
1 millirem (mrem) = 10 microsievert ( $\mu$ Sv)	1 microsievert ( $\mu$ Sv) = 100 microrem ( $\mu$ rem)
1 microrem ( $\mu$ rem) = 10 nanosievert (nSv)	1 nanosievert (nSv) = 100 nanorem (nrem)