

Activity (radioactivity) unit

The ISO measuring unit of radioactivity is the **becquerel (Bq)**.

1 Bq = 1 decay per second.

1 Bq is defined as the activity of a quantity of radioactive material in which an average of one nucleus decays per second and emits ionizing radiation.

The becquerel is a small unit in comparison with the non-metric unit "curie". One curie is the activity of one gram of the radium isotope 226 and corresponds to 37 billion becquerels.

For comparison: A medical radiotherapy machine typically contains a source with an activity of 50 trillion becquerel (50 terabecquerel / 50 TBq) of caesium-137.

Water containing less than 8 Bq/kg of the radioactive isotope caesium-137 is considered safe for consumption.

An average human body has an activity of about ten thousand becquerel (10 kilobecquerel / 10 kBq) stemming from its content of naturally radioactive elements (mainly sodium-40 and carbon-14).