

Conversion Factors to Effective Doses

Committed effective dose coefficients ($\mu\text{Sv/Bq}$) (ingestion)

	Strontium-90	Iodine-131	Cesium-134	Cesium-137	Plutonium-239	Tritium*
Three months old	0.23	0.18	0.026	0.021	4.2	0.000064
One year old	0.073	0.18	0.016	0.012	0.42	0.000048
Five years old	0.047	0.10	0.013	0.0096	0.33	0.000031
Ten years old	0.06	0.052	0.014	0.01	0.27	0.000023
Fifteen years old	0.08	0.034	0.019	0.013	0.24	0.000018
Adult	0.028	0.022	0.019	0.013	0.25	0.000018

$\mu\text{Sv/Bq}$: microsieverts/becquerel

*Tissue free water tritium

Source: Prepared based on the ICRP Publication 119, Compendium of Dose Coefficients based on ICRP Publication 60, 2012, International Commission on Radiological Protection (ICRP)

For dose assessment for internal exposure, doses are calculated by estimating an intake for each nuclide and chemical form and multiplying estimated intakes by dose coefficients. Dose coefficients are committed equivalent doses or committed effective doses for an intake of 1 Bq and a specific value has been given for each nuclide, chemical form, intake route (ingestion or inhalation), and for each age group by the ICRP.

The commitment period, i.e., the period during which doses are accumulated, is 50 years for adults and the number of years up to reaching age 70 after intake for children.

Included in this reference material on March 31, 2013

Updated on February 28, 2018