

B.11. Summary of Estimates of Probabilities of Effects

Effect	Population	Exposure period	Exposure modes	Probability
Low-LET radiation				
Mental effects Reduction in IQ	Fetus	8-15 weeks of gestation	High dose, high dose rate	30 IQ points Sv ⁻¹
Severe mental retardation	Fetus	8-15 weeks of gestation	High dose, high dose rate	40 × 10 ⁻² at 1 Sv
Hereditary Severe hereditary effects, including multifactorial diseases	Whole population	All generations	Low dose, low dose rate	1.0 × 10 ⁻² Sv ⁻¹
Cancer Fatal cancers (total)	Workers	Lifetime	Low dose, low dose rate	4.0 × 10 ⁻² Sv ⁻¹
Fatal cancers (total)	General population	Lifetime	Low dose, low dose rate	5.0 × 10 ⁻² Sv ⁻¹
Fatal cancer (in specific organs)	Workers General population	Lifetime	Low dose, low dose rate	See Table B-17
Skin (fatal)		Lifetime	High or low dose, low dose rate	2 × 10 ⁻⁴ Sv ⁻¹
Aggregated health detriment (in specific organs)		Lifetime	Low dose, low dose rate	See Table B-20
Tissue weighting factors				Paragraph B120
High-LET radiation				
Cancer and hereditary risks are the same as for low-LET radiation using w_R to assess equivalent or effective dose.				See main text for w_R values, Table 1
Radon: Fatal lung cancers	Workers	Lifetime		(1-4) × 10 ⁻⁴ WLM ⁻¹ (3-10) per Jhm ⁻³