

Table 1
Predicted increase in leukemia in exposed age group 0-1 in Wales and Scotland
using NRPB risk estimates and exposures. (source: NRPB)

Risk Factor (/Sv)	1 year exposure (μ Sv)	Predicted Leukemia yield (cases) ^b Scotland (pop. 66100)	Predicted Leukemia yield (cases) ^b Wales (pop. 38300)
0.0 125 (in utero)	88	0.07	0.04
	110	0.086	0.05
0.0065(age 0-10)	88	0.038	0.022
	110	0.047	0.027
0.004 (heritable damage)	10 ^a	0.0026	0.0015

a estimate of dose to fathers' testes over pre-conception period.

b over lifetime of person exposed

4. Observed increases in infant leukemia in Wales and Scotland, 1975-1992

The numbers of recorded cases of infant leukemia in Wales and Scotland over the period 1975 to 1994 are given in Table 2. The number of cases in Wales and Scotland increased sharply to 14 in the combined years 1987 and 1988 over the average level of 4.2 per two-year period as defined by the ten earlier years 1976-85. Infants who were in utero over the period of the fallout would be age 0-1 over both of these years and a better period for defining them would be the 18-month period from 1st Jan 1987 to 30th June 1988, in which there were 3 cases in Wales and 9 in Scotland, a statistically significant excess over previous averages.