TRENDS IN CHILDHOOD CANCER REGISTRATIONS GREAT BRITAIN 1974-1998

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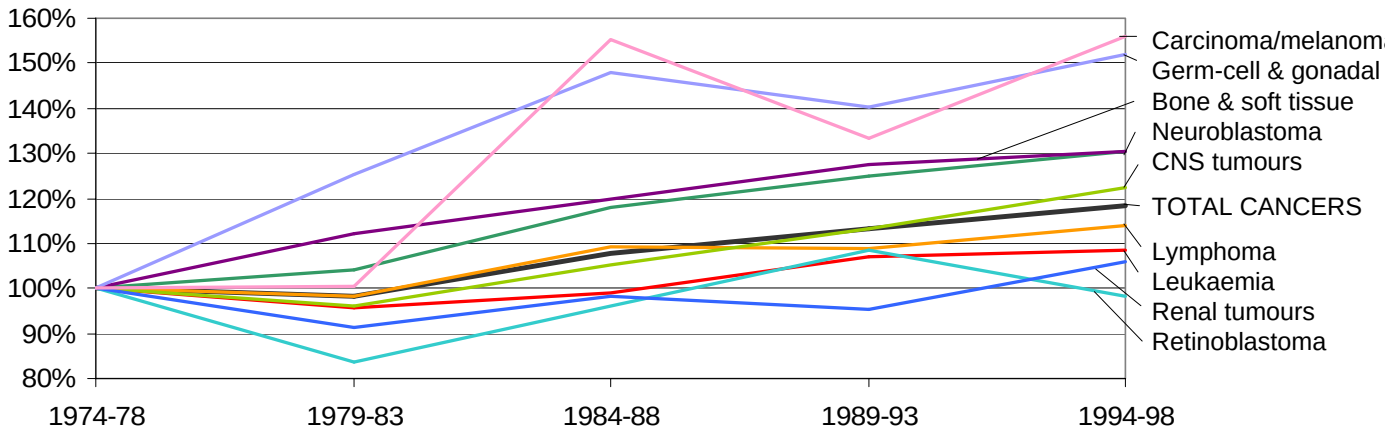
Age-standardised registration rates relative to 1974-78 = 100
National Registry of Childhood Tumours, Great Britain



The National Registry of Childhood Tumours is maintained by the Childhood Cancer Research Group (CCRG) within the Department of Paediatrics of Oxford University. It holds records of cancers diagnosed under the age of 15 in England, Wales and Scotland since 1962. The CCRG receives funding from the Department of Health and the Scottish Ministers.

We used Poisson regression to fit linear time trends to the logarithms of registration rates by single year of diagnosis 1974-98, adjusting for age at diagnosis (grouped as 0, 1-4, 5-9 and 10-14 years old) and sex.

There was an overall increase of 1% per year.

More than half of the diagnostic groups shown in the table (**shaded in yellow**) had a significant increasing trend. These include ALL (0.7% per year), NHL (1.2%), neuroblastoma (1.4%), astrocytoma (2.2%), Ewing's/PNET of bone or soft tissue (2.3%), intracranial & intraspinal germ-cell tumours (3.2%) and melanoma (4.8%). Only two (**shaded in grey**) showed a significant decrease.

Diagnostic shift may explain some of the relative changes. For example, the decrease in “other & unspecified gliomas” probably accounts for part of the increase in astrocytoma, as scanning has increased the proportion that can be biopsied.

Improvements in the efficiency of diagnosis and registration have probably contributed to the general increase in registration rates. It has become easier to track and record the diagnosis of new patients as treatment has become more centralised. It is also possible that in the past some children may have been recorded as dying of non-cancer causes that were in fact related to an underlying undiagnosed cancer.

It is not clear how much, if any, of the increase was due to real changes in incidence.

ICCC diagnostic groups, adapted. Groups with <4 cases per year are not shown.	Cases per year	% change per year	95% confidence interval
ALL	348	0.7	0.4 to 1.0
AML & other ANLL (a)	69	-0.2	-0.8 to 0.5
CML	10	1.0	-0.7 to 2.7
Unspecified leukaemia	6	-1.0	-3.1 to 1.1
Hodgkin's lymphoma	57	0.6	-0.1 to 1.3
NHL including Burkitt's lymphoma	75	1.2	0.5 to 1.8
Ependymoma	34	0.1	-0.8 to 1.1
Astrocytoma	126	2.2	1.7 to 2.7
PNET of CNS	64	0.9	0.3 to 1.6
Other & unspecified gliomas	45	-0.9	-1.7 to -0.1
Other specified CNS tumours	30	1.5	0.5 to 2.5
Unspecified CNS tumours	16	0.9	-0.4 to 2.3
Neuroblastoma & other SNS tumours	86	1.4	0.8 to 2.0
Retinoblastoma	39	0.5	-0.4 to 1.4
Wilms' tumour	75	0.3	-0.3 to 0.9
Hepatoblastoma (s)	9	1.6	-2.1 to 3.5
Osteosarcoma (a)	32	-0.1	-1.1 to 0.8
Ewings/PNET of bone or soft tissue (a)	33	2.3	1.3 to 3.2
Rhabdomyosarcoma	53	0.9	0.2 to 1.6
Fibrosarcoma	11	1.7	0.1 to 3.4
Other & unspec bone or soft tissue	21	2.5	1.3 to 3.7
Intracranial & intraspinal GCT	12	3.2	1.7 to 4.8
Other & unspecified non-gonadal GCT	9	2.4	0.5 to 4.3
Gonadal GCT	20	1.1	-0.1 to 2.4
Thyroid carcinoma	6	2.9	0.6 to 5.2
Nasopharyngeal carcinoma	4	-3.3	-6.1 to -0.4
Skin carcinoma (a)	7	1.8	-0.2 to 3.9
Other & unspecified carcinoma	11	3.0	1.4 to 4.7
Melanoma	13	4.8	3.2 to 6.5
Other unspecified cancers	5	6.2	3.6 to 8.9
TOTAL CANCERS (a)	1341	1.0	0.8 to 1.1
Differences in trend (p<0.05) between age groups (a) / males & females (s)			