

Appendix A

Number of newly diagnosed cancers registered among children under 15 years of age and resident in England, 2001 to 2015, grouped according to 'International Classification of Childhood Cancer, Third Edition' (ICCC-3)

Source: National Cancer Registration and Analysis Service, Public Health England, CAS accessed December 2017

% DCO = percentage registered from death certificate only

% MV = percentage with microscopic verification

ASR = Age standardised rate (World standard population)

Diagnostic group	Number of cases						Number of cases per million							
	Boys	Girls	Total	Mean no. of cases per year	% DCO	% MV	Boys				Girls			
							Aged 0-4	Aged 5-9	Aged 10-14	ASR	Aged 0-4	Aged 5-9	Aged 10-14	ASR
All cancers combined	11,617	9,672	21,289	1,419	0.1%	92.5%	214.07	130.01	141.18	165.79	193.33	102.53	127.75	145.00
I Leukaemias, myeloproliferative diseases, and myelodysplastic diseases	3,608	2,906	6,514	434	0.1%	96.9%	79.61	41.31	29.78	52.79	68.95	32.54	25.79	44.67
Ia Lymphoid leukaemias	2,819	2,253	5,072	338	0.0%	97.6%	63.69	33.15	20.92	41.42	55.60	26.34	16.75	34.88
Ia.1 Precursor cell leukaemias	2,783	2,229	5,012	334	0.0%	97.6%	63.11	32.72	20.42	40.91	55.25	25.94	16.45	34.53
Ia.2 Mature B-cell leukaemias	29	19	48	3	0.0%	97.9%	0.37	0.34	0.50	0.40	0.17	0.40	0.26	0.27
Ib Acute myeloid leukaemias	546	471	1,017	68	0.2%	96.3%	10.78	5.86	6.15	7.85	9.35	4.59	6.68	7.04
Ic Chronic myeloproliferative diseases	78	62	140	9	0.7%	94.3%	0.91	0.76	1.58	1.06	0.52	0.58	1.61	0.86
Ic (subset) Chronic myeloid leukaemia	52	43	95	6	0.0%	96.8%	0.25	0.59	1.33	0.67	0.17	0.36	1.35	0.58
Ic (subset) Other chronic myeloproliferative diseases	26	19	45	3	2.2%	88.9%	0.66	0.17	0.25	0.38	0.35	0.22	0.26	0.28
Id Myelodysplastic syndrome and other myelodysplastic diseases	114	74	188	13	1.1%	89.4%	2.99	1.02	0.75	1.70	2.22	0.58	0.44	1.17
Id (subset) Myelodysplastic syndrome	58	39	97	6	1.0%	85.6%	0.95	0.72	0.75	0.82	0.83	0.45	0.44	0.59
Id (subset) Juvenile myelomonocytic leukaemia & chronic myelomonocytic leukaemia	55	34	89	6	1.1%	94.4%	1.99	0.30	-	0.87	1.35	0.13	-	0.57
Ie Unspecified and other specified leukaemias	51	46	97	6	1.0%	83.5%	1.24	0.51	0.37	0.75	1.26	0.45	0.31	0.72
II Lymphomas and reticuloendothelial neoplasms	1,472	705	2,177	145	0.1%	97.4%	10.24	20.57	30.81	19.55	4.35	7.62	18.94	9.64
IIa Hodgkin lymphoma	596	356	952	63	0.0%	99.2%	2.24	6.97	15.72	7.68	0.35	2.85	12.39	4.65

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							Aged 0-4	Aged 5-9	Aged 10-14	ASR	Aged 0-4	Aged 5-9	Aged 10-14	ASR
IIb IIc Non-Hodgkin lymphomas (including Burkitt lymphoma)	829	324	1,153	77	0.1%	96.8%	7.09	13.09	14.55	11.19	3.22	4.64	6.37	4.59
IIb.1 Precursor cell lymphomas	173	86	259	17	0.4%	96.1%	1.91	2.72	2.62	2.38	0.96	1.74	1.09	1.25
IIb.2 Mature B-cell lymphomas (except Burkitt lymphoma)	154	75	229	15	0.0%	97.8%	0.87	1.95	3.62	2.02	0.61	0.76	1.92	1.04
IIb.3 Mature T-cell and NK-cell lymphomas	118	68	186	12	0.0%	97.8%	0.79	1.70	2.45	1.57	0.48	0.89	1.61	0.94
IIb.4 Non-Hodgkin lymphomas, NOS	65	23	88	6	0.0%	83.0%	0.58	1.02	1.12	0.88	0.22	0.22	0.57	0.32
IIc Burkitt lymphoma	320	72	392	26	0.0%	99.2%	2.99	5.69	4.74	4.37	0.96	1.03	1.18	1.04
IId Miscellaneous lymphoreticular neoplasms	25	15	40	3	0.0%	95.0%	0.66	0.25	0.12	0.38	0.61	0.00	0.04	0.25
IIE Unspecified lymphomas	22	10	32	2	6.3%	71.9%	0.25	0.25	0.42	0.30	0.17	0.13	0.13	0.15
III CNS and miscellaneous intracranial and intraspinal neoplasms	2,846	2,385	5,231	349	0.1%	82.6%	43.49	40.67	34.93	40.10	40.46	32.99	31.20	35.36
IIIa Ependymomas and choroid plexus tumour	291	237	528	35	0.0%	96.6%	7.50	2.51	2.12	4.33	5.70	2.76	1.92	3.65
IIIa.1 Ependymomas	215	174	389	26	0.0%	96.4%	4.93	2.12	1.91	3.15	3.52	2.45	1.66	2.64
IIIa.2 Choroid plexus tumour	76	63	139	9	0.0%	97.1%	2.57	0.38	0.21	1.18	2.18	0.31	0.26	1.02
IIIb Astrocytomas	1,163	1,058	2,221	148	0.1%	85.6%	16.29	18.15	14.26	16.30	17.97	14.89	13.57	15.70
IIIc Intracranial and intraspinal embryonal tumours	589	367	956	64	0.0%	98.3%	10.49	9.18	4.99	8.47	8.00	4.10	3.97	5.57
IIIc.1 Medulloblastoma	436	228	664	44	0.0%	98.6%	6.18	7.99	4.12	6.16	3.70	3.34	2.97	3.37
IIIc.2 Embryonal CNS tumour NOS	69	76	145	10	0.0%	97.9%	1.45	0.72	0.71	1.00	2.00	0.53	0.79	1.18
IIIc.4 Atypical teratoid/rhabdoid tumour	80	61	141	9	0.0%	97.2%	2.78	0.38	0.17	1.25	2.26	0.18	0.22	1.00
IIId Other gliomas	302	249	551	37	0.0%	42.1%	3.48	4.84	4.32	4.17	3.39	4.64	2.92	3.66
IIId.1 Oligodendrogliomas	27	21	48	3	0.0%	100.0%	0.37	0.25	0.50	0.37	0.22	0.49	0.22	0.31
IIId.2 Mixed and unspecified gliomas	257	216	473	32	0.0%	33.2%	3.03	4.16	3.58	3.55	3.09	4.10	2.31	3.19

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III d.3 Neuroepithelial glial tumours of uncertain origin	18	12	30	2	0.0%	90.0%	0.08	0.42	0.25	0.24	0.09	0.04	0.39	0.16
III e Other specified intracranial and intraspinal neoplasms	388	365	753	50	0.0%	88.7%	3.48	5.01	7.73	5.21	3.52	5.22	7.29	5.16
III e.1 Pituitary adenomas and carcinomas	30	39	69	5	0.0%	66.7%	0.00	0.21	1.04	0.37	0.13	0.18	1.40	0.51
III e.2 tumours of the sellar region (craniopharyngiomas)	133	109	242	16	0.0%	88.8%	1.12	1.91	2.54	1.79	0.83	2.27	1.70	1.55
III e.3 Pineal parenchymal tumours	28	29	57	4	0.0%	91.2%	0.37	0.38	0.42	0.39	0.44	0.45	0.39	0.43
III e.4 Neuronal and mixed neuronal-glial tumours	159	145	304	20	0.0%	94.1%	1.53	2.17	2.95	2.15	1.91	1.92	2.53	2.09
III e.5 Meningiomas	38	43	81	5	0.0%	85.2%	0.46	0.34	0.79	0.52	0.22	0.40	1.27	0.58
III f Unspecified intracranial and intraspinal neoplasms	113	109	222	15	0.9%	30.6%	2.24	0.98	1.50	1.62	1.87	1.38	1.53	1.61
IV Neuroblastoma and other peripheral nervous cell tumours	669	599	1,268	85	0.0%	96.2%	23.67	3.23	0.91	10.47	21.88	3.21	1.05	9.81
IV a Neuroblastoma and ganglioneuroblastoma	663	593	1,256	84	0.0%	96.3%	23.59	3.23	0.75	10.39	21.84	3.21	0.83	9.73
IV b Other peripheral nervous cell tumours	6	6	12	1	0.0%	91.7%	0.08		0.17	0.08	0.04		0.22	0.08
V Retinoblastoma	265	269	534	36	0.0%	69.1%	10.57	0.34	0.08	4.23	11.27	0.36	0.09	4.50
VI Renal tumours	563	645	1,208	81	0.2%	97.7%	18.24	3.95	1.25	8.70	20.92	5.79	1.48	10.40
VI a Nephroblastoma and other nonepithelial renal tumours	550	632	1,182	79	0.2%	97.9%	18.08	3.87	0.96	8.52	20.79	5.75	1.09	10.22
VI a.1 Nephroblastoma (Wilms Tumour)	499	602	1,101	73	0.2%	97.9%	16.25	3.78	0.75	7.73	19.71	5.75	0.87	9.74
VI a.2 Rhabdoid renal tumour	19	16	35	2	0.0%	94.3%	0.75	0.04	-	0.30	0.70	0.00	-	0.27
VI b Renal carcinomas	11	10	21	1	0.0%	95.2%	0.12	0.08	0.25	0.15	0.00	0.04	0.39	0.13
VI c Unspecified malignant renal tumours	2	3	5	0	0.0%	60.0%	0.04	-	0.04	0.03	0.13	-	0.00	0.05
VII Hepatic tumours	145	122	267	18	0.0%	95.9%	5.02	0.55	0.46	2.25	4.18	0.36	0.79	1.96
VII a Hepatoblastoma	130	98	228	15	0.0%	96.5%	4.73	0.42	0.25	2.04	3.92	0.18	0.17	1.62

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VIIb Hepatic carcinomas	14	23	37	2	0.0%	94.6%	0.25	0.13	0.21	0.20	0.22	0.18	0.61	0.32
VIIc Unspecified malignant hepatic tumours	1	1	2	0	0.0%	50.0%	0.04	-	-	0.02	0.04	-	-	0.02
VIII Malignant bone tumours	472	416	888	59	0.1%	97.7%	1.58	5.01	13.14	6.04	0.74	5.62	11.91	5.56
VIIIa Osteosarcomas	251	231	482	32	0.2%	99.0%	0.46	2.34	7.69	3.16	0.22	2.63	7.29	3.05
VIIIb Chondrosarcomas	13	9	22	1	0.0%	100.0%	-	0.13	0.42	0.16	-	0.09	0.31	0.12
VIIIc Ewing tumour and related sarcomas of bone	175	152	327	22	0.0%	99.1%	0.79	2.21	4.32	2.27	0.48	2.36	3.84	2.06
VIIId Other specified malignant bone tumours	20	12	32	2	0.0%	96.9%	0.21	0.17	0.46	0.27	0.00	0.22	0.31	0.16
VIIIE Unspecified malignant bone tumours	13	12	25	2	0.0%	56.0%	0.12	0.17	0.25	0.18	0.04	0.31	0.17	0.17
IX Soft tissue and other extrasosseous sarcomas	786	583	1,369	91	0.0%	98.9%	12.56	9.01	11.27	11.04	10.31	6.37	8.86	8.62
IXa Rhabdomyosarcomas	423	282	705	47	0.0%	99.3%	8.58	5.48	3.62	6.14	6.05	3.48	2.84	4.29
IXb Fibrosarcomas, peripheral nerve sheath tumours, and other fibrous neoplasms	78	57	135	9	0.0%	98.5%	1.16	0.55	1.54	1.07	0.96	0.45	1.09	0.83
IXb.1 Fibroblastic and myofibroblastic tumours	44	41	85	6	0.0%	98.8%	1.00	0.34	0.50	0.64	0.87	0.36	0.57	0.62
IXb.2 Nerve sheath tumours	34	16	50	3	0.0%	98.0%	0.17	0.21	1.04	0.43	0.09	0.09	0.52	0.21
IXc Kaposi sarcoma	2	3	5	0	0.0%	80.0%	0.04	0.00	0.04	0.03	0.00	0.04	0.09	0.04
IXd Other specified soft tissue sarcomas	234	202	436	29	0.0%	98.4%	2.28	2.29	5.20	3.13	2.61	2.18	4.06	2.89
IXd1 IXd.2 Extrasosseous Ewing sarcoma family tumours	95	96	191	13	0.0%	99.0%	0.83	0.89	2.25	1.26	1.09	1.25	1.88	1.37
IXd.3 Extrarenal rhabdoid tumour	22	27	49	3	0.0%	98.0%	0.79	0.13	0.00	0.35	1.04	0.09	0.04	0.45
IXd.5 Fibrohistiocytic tumours	41	32	73	5	0.0%	98.6%	0.29	0.47	0.96	0.54	0.09	0.45	0.87	0.43
IXd.7 Synovial sarcomas	53	25	78	5	0.0%	100.0%	0.17	0.55	1.50	0.68	0.13	0.36	0.61	0.34
IXe Unspecified soft tissue sarcomas	49	39	88	6	0.0%	100.0%	0.50	0.68	0.87	0.67	0.70	0.22	0.79	0.57

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X Germ cell tumours, trophoblastic tumours, and neoplasms of gonads	319	385	704	47	0.0%	92.5%	6.39	1.40	5.49	4.52	6.70	3.03	7.11	5.64
Xa Intracranial and intraspinal germ cell tumours	153	76	229	15	0.0%	84.3%	1.16	1.15	4.08	2.00	1.17	0.94	1.22	1.11
Xb Malignant extracranial and extragonadal germ cell tumours	71	118	189	13	0.0%	95.8%	2.45	0.04	0.46	1.09	4.57	0.40	0.17	1.95
Xc Malignant gonadal germ cell tumours	90	181	271	18	0.0%	97.4%	2.65	0.17	0.91	1.35	0.91	1.65	5.37	2.44
Xd Gonadal carcinomas	1	4	5	0	0.0%	100.0%	0.04	0.00	0.00	0.02	0.00	0.04	0.13	0.05
Xe Other and unspecified malignant gonadal tumours	4	6	10	1	0.0%	80.0%	0.08	0.04	0.04	0.06	0.04	0.00	0.22	0.08
XI Other malignant epithelial neoplasms and malignant melanomas	402	589	991	66	0.1%	98.0%	1.33	3.23	12.23	5.11	2.22	4.01	19.55	7.83
XIa Adrenocortical carcinomas	7	24	31	2	0.0%	100.0%	0.08	0.17	0.04	0.10	0.74	0.13	0.17	0.38
XIb Thyroid carcinomas	49	131	180	12	0.0%	99.4%	0.25	0.47	1.33	0.63	0.48	0.85	4.41	1.74
XIc Nasopharyngeal carcinomas	27	8	35	2	0.0%	100.0%	-	0.08	1.04	0.33	-	0.09	0.26	0.10
XId Malignant melanomas	63	80	143	10	0.0%	95.8%	0.62	0.42	1.58	0.84	0.48	0.85	2.18	1.09
XIe Skin carcinomas	78	92	170	11	0.0%	99.4%	0.21	0.72	2.33	0.99	0.30	0.98	2.75	1.23
XIf Other and unspecified carcinomas	178	254	432	29	0.2%	97.2%	0.17	1.36	5.91	2.22	0.22	1.11	9.77	3.28
XIf.1 Carcinomas of salivary glands	17	40	57	4	0.0%	100.0%	0.00	0.17	0.54	0.21	0.09	0.13	1.53	0.52
XIf.3 Carcinomas and carcinoids of appendix	111	172	283	19	0.0%	98.6%	0.04	0.42	4.16	1.36	0.00	0.76	6.76	2.21
XII Other and unspecified malignant neoplasms	70	68	138	9	0.0%	54.3%	1.37	0.72	0.83	1.00	1.35	0.62	1.00	1.01
XIIa Other specified malignant tumours	14	23	37	2	0.0%	100.0%	0.46	0.04	0.08	0.21	0.52	0.22	0.26	0.35
XIIb Other unspecified malignant tumours	56	45	101	7	0.0%	37.6%	0.91	0.68	0.75	0.79	0.83	0.40	0.74	0.66