

Supporting Information

Supplementary tables

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Appendix to: Youlden DR, Baade PD, Green AC, et al. The incidence of childhood cancer in Australia, 1983–2015, and projections to 2035. *Med J Aust* 2020; doi: 10.5694/mja2.50456.

Table 1. Mean annual numbers and incidence rates of childhood cancers by sex, age group, and diagnostic group/subgroup, Australia, 2011–2015: age-standardised to world standard population

	Mean annual number of cases	Incidence rate (per million population per year)* (95% CI)	
All childhood cancers combined	770	175 (170–181)	
Sex			
Boys	420 (54.5%)	186 (178–194)	
Girls	350 (45.5%)	164 (156–172)	
Age group at diagnosis			
0–4 years	359 (46.6%)	237 (226–248)	
5–9 years	203 (26.3%)	139 (130–148)	
10–14 years	208 (27.1%)	149 (140–158)	
Diagnostic group/subgroup [†]			
I. Leukaemias, myeloproliferative and myelodysplastic diseases	240 (31.1%)	54.3 (51.3–57.5)	
la. Lymphoid leukaemias	188 (24.4%)	43.1 (40.4–46.0)	
Ib. Acute myeloid leukaemias	31.6 (4.1%)	7.3 (6.2–8.5)	
II. Lymphomas and reticuloendothelial neoplasms	79.4 (10.3%)	18.3 (16.6–20.2)	
IIa. Hodgkin lymphomas	26.2 (3.4%)	6.2 (5.2–7.3)	
IIb. Non-Hodgkin lymphomas (other than Burkitt lymphomas)	24.4 (3.2%)	5.7 (4.7–6.8)	
Ilc. Burkitt lymphomas	15.0 (1.9%)	3.5 (2.8–4.4)	
III. Central nervous system and intracranial/intraspinal neoplasms [‡]	192 (25.0%)	43.8 (41.1–46.7)	
IIIa. Ependymomas and choroid plexus tumours	19.4 (2.5%)	4.5 (3.6–5.4)	
IIIb. Astrocytomas	73.2 (9.5%)	17.0 (15.3–18.8)	
IIIc. Intracranial and intraspinal embryonal tumours	33.4 (4.3%)	7.7 (6.6–9.0)	
IIId. Other gliomas	22.0 (2.9%)	5.1 (4.2–6.2)	
IV. Neuroblastoma and other peripheral nervous cell tumours	45.8 (5.9%)	10.2 (9.0–11.7)	
V. Retinoblastoma	20.0 (2.6%)	4.5 (3.6–5.4)	
VI. Renal tumours	36.2 (4.7%)	8.1 (7.0–9.4)	
VIa. Nephroblastoma and other non-epithelial renal tumours	35.0 (4.5%)	8.0 (6.8–9.2)	
VII. Hepatic tumours	11.6 (1.5%)	2.6 (2.0-3.4)	
VIIa. Hepatoblastoma	10.0 (1.3%)	2.3 (1.7–3.0)	
VIII. Malignant bone tumours	30.6 (4.0%)	7.1 (6.0–8.3)	
VIIIa. Osteosarcomas	14.2 (1.8%)	3.4 (2.6–4.2)	
VIIIc. Ewing tumours and related bone sarcomas	14.8 (1.9%)	3.5 (2.7–4.4)	
IX. Soft tissue and other extra-osseous sarcomas	46.4 (6.0%)	10.6 (9.3–12.1)	
IXa. Rhabdomyosarcomas	23.2 (3.0%)	5.3 (4.4–6.4)	
X. Germ cell tumours, [‡] trophoblastic tumours and neoplasms of gonads	27.0 (3.5%)	6.2 (5.2–7.3)	
XI. Other malignant epithelial neoplasms and melanomas	38.2 (5.0%)	8.9 (7.7–10.3)	
XId. Melanomas	6.6 (0.9%)	1.6 (1.1–2.2)	
XII. Other and unspecified malignant neoplasms	3.0 (0.4%)	0.7 (0.4–1.1)	

CI = confidence interval.

^{*} Age-standardised to the 2000 world standard population. 1

[†] Defined according to the International Classification of Childhood Cancers (ICCC-3).²

[‡] Includes intracranial and intraspinal tumours of benign or uncertain behaviour.

Table 2. Baseline (2011-2015) and projected (to 2035) numbers of cases and incidence rates of childhood cancer in Australia, using different population projections and 16% damping per year

Population projection (for cancer incidence projections)

	Series A (high)		Series B (intermediate)		Series C (low)	
Diagnostic group*	Number of cases	Incidence rate, per million population [†] (95% CI)	Number of cases	Incidence rate, per million population [†] (95% CI)	Number of cases	Incidence rate, per million population [†] (95% CI)
Annual mean, 2011–2015 (baseline)						
All childhood cancers	770	174 (168–180)	770	174 (168–180)	770	174 (168–180)
Leukaemias	240	53 (51–57)	240	53 (51–57)	240	53 (51–57)
Tumours of the CNS [‡]	192	44 (41–47)	192	44 (41–47)	192	44 (41–47)
Projected, by year						
2020						
All childhood cancers	937	181 (169–193)	904	181 (169–193)	872	180 (169–193)
Leukaemias ^{§,¶}	281	54 (48–60)	270	54 (47–60)	259	53 (47–60)
Central nervous system tumours ^{‡,¶}	252	49 (43–55)	243	49 (43–55)	235	49 (43–55)
2025						
All childhood cancers	1053	184 (173–196)	978	184 (173–196)	905	184 (172–196)
Leukaemias ^{§,¶}	306	53 (47–59)	282	53 (47–59)	259	53 (46-59)
Central nervous system tumours ^{‡,¶}	289	51 (45–57)	268	51 (45–57)	248	50 (44–57)
2030						
All childhood cancers	1148	186 (175–197)	1024	185 (174–197)	906	185 (173–197)
Leukaemias ^{§,¶}	330	53 (47–59)	292	53 (47–59)	256	52 (46–59)
Central nervous system tumours ^{‡,¶}	317	52 (46–58)	283	51 (46–58)	250	51 (45–58)
2035						
All childhood cancers	1219	186 (176–197)	1060	186 (175–197)	910	185 (173–198)
Leukaemias ^{§,¶}	350	53 (48–59)	302	53 (47–59)	258	53 (46–59)
Central nervous system tumours ^{‡,¶}	338	52 (46–58)	293	52 (46–58)	251	51 (45–58)

CI = confidence interval.

References

- 1. Ahmad OB, Boschi-Pinto C, Lopez AD, et al. Age standardization of rates: a new WHO standard (GPE Discussion Paper Series, No. 31). Geneva: World
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 Australian Bureau of Statistics. 3101.0. Australian demographic statistics, Sep 2002 (2001 census edition, final). Mar 2003. https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Sep%202002?OpenDocument (viewed Nov 2018).

^{*} Defined according to International Classification of Childhood Cancers (ICCC-3).²

[†] Age-standardised to the 2001 Australian standard population (Series A, B, or C); confidence interval relates to age-standardisation

[‡] Includes intracranial and intraspinal tumours of benign or uncertain behaviour.

[¶] The projections for specific cancer types (leukaemias and CNS tumours) are less robust than those for all childhood cancers combined because of the smaller numbers of cases, and should be interpreted with due caution.