

Childhood Cancer Survival

Childhood Cancer Survival in Aotearoa, New Zealand 2010 – 2019

This 'snapshot' highlights some of the key statistics relating to the survival of children with cancer in Aotearoa, New Zealand between 2010-2019. The full report can be viewed at childcancernetwork.org.nz

KEY FACTS

Eight out of ten children diagnosed will survive at least 5 years

This means that childhood cancer outcomes in New Zealand are on-par with other high-income countries such as Australia, Canada, the United Kingdom and the United States of America.

Childhood cancer survival has steadily improved over time

Thanks to clinical trials and better treatments, survival rates have improved for all types of childhood cancer in the past decade. The greatest improvements in survival were observed in brain tumours, neuroblastomas and soft tissue sarcomas. For some cancer types such as Hodgkin lymphoma, retinoblastoma, and renal tumours, 5-year cancer survival was over 90%.

The 5-year survival rate for all childhood cancers combined is **86%**

5-year cancer survival rates are used to evaluate the success of treatment and the likelihood that a person will live 'disease-free' for 5 or more years.

1522 children were diagnosed with cancer between 2010 and 2019

219 of these children died as a result of their diagnosis or treatment required to attempt cure

What are the 5-year survival rates for common types of cancer?



Blood cancers

Lymphoid leukaemia 93%
Acute myeloid leukaemia 75%
Hodgkin lymphoma 98%
Non-Hodgkin lymphomas 90%



Brain tumours

Ependymomas and choroid plexus tumours 82%
Astrocytomas 88%
Intracranial and intraspinal embryonal tumours 56%
Other gliomas 50%



Solid tumours

Retinoblastoma 100%
Osteosarcoma 80%
Ewings tumours 86%
Rhabdomyosarcoma 74%

64% of childhood cancer deaths were due to brain tumours

What are the survival rates for each cancer type 1-year, 3-years and 5-years after diagnosis?

| | I Leukaemias, myeloproliferative diseases, and myelodysplastic diseases | II Lymphomas and reticuloendothelial neoplasms | III CNS and miscellaneous intracranial and intraspinal neoplasms | IV Neuroblastoma and other peripheral nervous cell tumours | V Retinoblastoma | VI Renal tumours | VII Hepatic tumours | VIII Malignant bone tumours | IX Soft tissue and other extraosseous sarcomas | X Germ cell tumours, trophoblastic tumours, and neoplasms of gonads | XI Other malignant epithelial neoplasms and malignant melanomas |
|---------|---|--|--|--|------------------|------------------|---------------------|-----------------------------|--|---|---|
| 1-year | 96% | 96% | 85% | 93% | 100% | 96% | 77% | 97% | 89% | 98% | 98% |
| 3-years | 91% | 95% | 75% | 83% | 100% | 94% | 73% | 86% | 78% | 98% | 94% |
| 5-years | 89% | 95% | 73% | 80% | 100% | 94% | 73% | 81% | 77% | 98% | 94% |

% of children surviving

What are the 5-year survival rates by age-group, sex and prioritised ethnicity?



What can be done to further improve childhood cancer survival rates?

Although childhood cancer survival rates are high and have increased over time, there are several cancer types that have poorer survival than others, notably brain tumours, liver tumours and soft tissue sarcomas. Similarly, whilst improvements in survival have been observed for all ethnicity groups, the greatest gains were observed among non-Māori and Pacific peoples. The noteworthy survival gap between Māori, non-Māori and Pacific peoples should be acknowledged and warrants attention. To improve survival outcomes for children with cancer, access to modern diagnostic tools and therapies is essential. Nationally consistent protocols and guidelines must be maintained and research carried out to identify actions which could further improve Māori and Pacific child cancer outcomes.

About the New Zealand Children's Cancer Registry

This snapshot was produced using data from the New Zealand Children's Cancer Registry. The NZCCR captures data on children aged 0-14 years diagnosed with cancer in New Zealand. This snapshot report does not include patients referred to paediatric oncology centres from overseas, those who are aged 15 years and over, or children who are diagnosed with a non-malignant/other haematological condition. Ethnicity was prioritised to Māori, Pacific Peoples, Asian, Middle Eastern/Latin American/African (MELAA), Other, and NZ European according to the Ministry of Health data protocols.