Survival of Children, Teenagers and Young Adults with Cancer in England

NCIN Data Briefing

Trends in one-year and five-year survival rates since 1990 for 0-14 and 15-24 age groups for the main cancer diagnostic groups applicable to 0-24 age group

The most recent one and five-year relative survival rates for the 0-14 and 15-24 year age groups are compared against rates for cancer patients diagnosed between 1990 and 1994. We have included the main cancer diagnostic groups that are applicable to both children and teenagers and young adults (TYA).

Five-year survival

![Graph showing five-year survival rates for different cancer diagnostic groups.](image)

*includes borderline and benign tumours. Error bars represent 95% Confidence Intervals

Five-year survival rates improved for most types of cancer between 1990-1994 and 1999-2003. Survival for bone cancer decreased although this was not statistically significant in either age group. Survival rates remained the same for 15-24 year olds with CNS tumours and for 0-14 year olds with soft tissue sarcomas. The largest increases in survival were seen for leukaemias in both age groups, CNS tumours and germ cell neoplasms in the 0-14 age group and soft-tissue sarcomas in 15-24 year olds.

Among patients diagnosed in the period 1999-2003, the 0-14 year age group had five-year survival rates that were higher than those for 15-24 year olds by 25% for leukaemias and by 6.7% for soft-tissue sarcomas, whereas five-year survival for germ cell neoplasms was 5.5% higher for 15-24 year olds than for the 0-14 age group. For all other diagnostic categories, the differences in five-year survival between the age groups were less than 5%.

KEY MESSAGE:
Survival rates for most, though not all, types of cancer have increased in recent years for both 0 - 14 and 15 - 24 year olds.
One-year survival rates also increased from 1990-1994 to 2003-2007 for all groups except soft tissue sarcomas in both age groups and CNS tumours in the 15-24 age group. Overall, there was a greater improvement among the 0-14 year olds than 15-24 year olds.

One-year survival rates for patients diagnosed in 2003-2007 were higher for the 0-14 age group for leukaemias, bone neoplasms and soft-tissue sarcomas, and higher for 15-24 year olds with CNS tumours. The largest difference between the two age groups was 13.6% for leukaemias.

**One-year survival**

![One-year survival rates graph](image)

*includes borderline and benign tumours. Error bars represent 95% Confidence Intervals

**Conclusions and further work**

Survival rates for most types of cancer are similar in those aged 0-14 years and in 15-24 year olds although for patients with leukaemia survival is higher for those aged 0-14 years. Rates have improved over time for most types of cancer. Many of the differences reported here are based on relatively small numbers of patients, making it difficult to rule out chance as a possible explanation.

Future outputs will compare survival rates for the more common individual types of cancer such as acute lymphoid leukaemia (ALL), non-Hodgkin lymphoma (NHL) and Hodgkin lymphoma (HL) across both age groups and, where numbers allow, by five-year age band. We will also provide information on cancers which are common in only one of these age groups.

All numbers and rates included here are available from the NWCIS and CCRG websites.

**FIND OUT MORE:**

Children Cancer Research Group (CCRG) and the North West Cancer Intelligence Service (NWCIS)

CCRG and NWCIS are the lead Cancer Registries for cancer in children and cancer in teenagers and young adults respectively.

[http://www.ccrg.ox.ac.uk](http://www.ccrg.ox.ac.uk)  [http://www.nwcis.nhs.uk](http://www.nwcis.nhs.uk)

**Other useful resources within the NCIN partnership:**

Cancer Research UK CancerStats – Key facts and detailed statistics for health professionals

[http://info.cancerresearchuk.org/cancerstats/](http://info.cancerresearchuk.org/cancerstats/)

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The National Cancer Intelligence Network is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research. Sitting within the National Cancer Research Institute (NCRI), the NCIN works closely with cancer services in England, Scotland, Wales and Northern Ireland. In England, the NCIN is part of the National Cancer Programme.