The childhood cancer burden is strongly related to level of development, with high incidence in high-income countries but higher mortality in low-income countries.

Cancers occurring in childhood and adolescence differ markedly from cancers in adults in their incidence and tumor characteristics. Worldwide, the average annual incidence in children aged less than 15 years is 140 new cases per million children, although there are threshold variations between world regions and ethnic groups.

More than half of long-term survivors of childhood cancer experience chronic health conditions.

The incidence of childhood cancer in children and adolescents has been increasing by 0.5 to 1 percent per year in the high-income countries with established cancer registries over the past few decades. Although the increase may in part reflect more frequent diagnosis facilitated by advanced imaging techniques, other factors may have also contributed. Exposure to high doses of ionizing radiation, high birth weight and certain genetic syndromes have been consistently associated with increased risk of cancer in children. The role of other risk factors, such as air pollutants, tobacco or pesticide use, older parental age, or fewer children per family is debated. Potentially protective effects of breastfeeding and folate supplements are being investigated.

FIGURE 14. Five-year age-standardized net survival (%) observed in the available cohorts of cases diagnosed with lymphoid leukaemia

The distribution of cancer in adolescents differs from that of children and adults.