

# Steady Decrease in Severe Health Problems for Childhood Cancer Survivors

For immediate release

June 2, 2017

## Contact

Ashley Yum

571-483-1376

[Ashley.Yum@asco.org](mailto:Ashley.Yum@asco.org)

## ASCO Perspective

*“Perhaps no other area of oncology has seen such dramatic progress in treatment over the past decades as childhood cancer. As a result of advances in treatment and care, children with cancer are not only living longer, they are benefitting from reductions in the long-term side-effects of cancer treatment. These results show how important it is to fund and conduct studies of cancer survivors,” said Timothy D. Gilligan, MD, MSc, ASCO Expert.*

CHICAGO – Treatments for childhood cancer are often intense and carry the risk of lifelong health problems for survivors. An analysis of 23,600 childhood cancer survivors in the Childhood Cancer Survivor Study (CCSS), funded by the National Institutes of Health, found that the rate of severe health problems occurring five or more years after diagnosis has declined over time.

The study will be featured in a press briefing today and presented at the [2017 American Society of Clinical Oncology \(ASCO\) Annual Meeting](#).

The rate of such problems by 15 years after diagnosis was 8.8% among survivors diagnosed in the 1990s, but 10.1% among those diagnosed in the 1980s and 12.7% among those diagnosed in the 1970s. The largest decreases over three decades occurred among survivors with Wilms’ tumor (43%) and Hodgkin lymphoma (25%).

Advances in treatment and supportive care have improved the five-year survival rate after childhood cancer diagnosis, from 58% in the 1970s to 84% today. A previous report from the CCSS showed that changes in treatment over three decades lowered the chance of dying from late effects of therapy among childhood cancer survivors by 6.4%.<sup>1</sup>

“Our analysis marks the first comprehensive assessment of changes in the rates of chronic health complications over time in a large group of cancer survivors,” said lead study author Todd M.

Gibson, PhD, an Assistant Member at St. Jude Children's Research Hospital in Memphis, TN.

"From our findings, it is clear that survivors diagnosed and treated in more modern treatment eras are doing better. Not only are more children being cured, but they also have lower risk for developing serious health problems due to cancer treatment later in life."

### **About the Study**

Researchers analyzed data from the CCSS, which uses periodic surveys to explore long-term health outcomes in survivors of childhood cancer who were diagnosed between 1970 and 1999 and survived at least five years after diagnosis.

This analysis focused on the incidence of severe, disabling, life-threatening or fatal health problems arising within 15 years of childhood cancer diagnosis. The median patient age was 28 years, with a median of 21 years from diagnosis. The researchers gathered information about the health problems from surveys (self-reported data) and from the National Death Index, for cases where survivors died as a result of late effects of treatment.

### **Key Findings**

The 15-year cumulative incidence of severe health conditions decreased from 12.7% among childhood cancer survivors diagnosed in the 1970s to 10.1% and 8.8% among those diagnosed in the 1980s and 1990s, respectively.

By cancer type, over the three decades the occurrence of severe health problems by 15 years after diagnosis decreased from:

- 13% to 5% among survivors of Wilms' tumor (a rare kidney cancer)
- 18% to 11% among survivors of Hodgkin lymphoma
- 15% to 9% among survivors of astrocytoma (the second most common childhood cancer)
- 10% to 6% among survivors of non-Hodgkin lymphoma
- 9% to 7% among survivors of acute lymphoblastic leukemia (the most common childhood cancer)

However, researchers found no reductions in severe health problems among survivors of other types of childhood cancers, such as neuroblastoma, acute myeloid leukemia (AML), soft-tissue sarcoma, and osteosarcoma.

The greatest reductions were found in the incidence of endocrine conditions (4% in the 1970s vs. 1.6% in the 1990s) and new cancers (2.4% in the 1970s vs. 1.6% in the 1990s), followed by gastrointestinal conditions and neurological conditions. The rates of heart or lung conditions did not change.

"We were a little surprised that the incidence of severe cardiovascular disease did not decrease, knowing that deaths from cardiovascular disease dropped among survivors in recent decades,"

said Dr. Gibson. “This is a reminder that survivors continue to have an increased risk for serious health problems compared to the general population and need to be followed closely.”

### **Next Steps**

The researchers plan to delve deeper into specific health conditions, beyond the broad categories captured in this analysis. They would also like to follow survivors beyond 15 years after diagnosis and explore how late treatment effects intersect with aging.

This study was funded by the National Institutes of Health.

View the [full abstract](#).

### **For your readers:?**

- [Guide to Childhood Cancer](#)
- [Late Effects of Childhood Cancer](#)
- [Managing Late Effects of Childhood Cancer](#)

[View the disclosures](#) for the 2017 ASCO Annual Meeting News Planning Team.

**ATTRIBUTION TO THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY ANNUAL MEETING IS REQUESTED IN ALL COVERAGE.**

###

<sup>1</sup> Armstrong GT, et al. Reduction in Late Mortality among 5-Year Survivors of Childhood Cancer. *N Engl J Med* 374:833-842, 201

## **About ASCO:**

Founded in 1964, the American Society of Clinical Oncology, Inc. (ASCO®) is committed to making a world of difference in cancer care. As the world’s leading organization of its kind, ASCO represents more than 40,000 oncology professionals who care for people living with cancer. Through research, education, and promotion of the highest-quality patient care, ASCO works to conquer cancer and create a world where cancer is prevented or cured, and every survivor is healthy. ASCO is supported by its affiliate organization, the Conquer Cancer Foundation. Learn more at [www.ASCO.org](http://www.ASCO.org), explore patient education resources at [www.Cancer.Net](http://www.Cancer.Net), and follow us on Facebook, Twitter, LinkedIn, and YouTube.

---