International Childhood Cancer Day 2022: Targeted research in childhood needed

Lyon, France, 15 February 2022 – Cancer in children is rare, but cancer remains a leading cause of death for children and adolescents. The International Agency for Research on Cancer (IARC) estimates that in 2020 almost 280,000 children and adolescents (aged 0–19 years) were diagnosed with cancer worldwide. However, the actual number may be much higher, because in many countries childhood cancer is difficult to diagnose.

In high-income countries, most childhood cancers can be treated and cured. In low- and middle-income countries, the lack of efficient diagnosis and treatment facilities leads to a high number of avoidable deaths. Almost 75% of cases of childhood cancer and almost 85% of cancer deaths in children occur in Africa and Asia.

The most common cancer types in children are leukaemia, brain cancers, lymphomas, and solid tumours such as neuroblastoma and Wilms tumour.

Cancer types that develop in children are very different from those in adults. There is an urgent need for targeted research to better understand, prevent, and cure paediatric cancers.

IARC scientists are conducting a wide range of research initiatives related to childhood cancer, with a focus on several important research areas.

Capacity-building and childhood cancer registries
IARC supports the World Health Organization (WHO) Global Initiative for Childhood Cancer and is helping to establish and strengthen the information systems that are needed to improve the survival of children with cancer, especially in countries with limited resources.

As part of a bilateral collaborative agreement between IARC and St. Jude Children’s Research Hospital (USA), called Targeting Childhood Cancer through the Global Initiative for Cancer Registry Development (ChildGICR), an online ChildGICR Masterclass was organized to train registry professionals in the principles of childhood cancer registration. The participants will transmit their acquired knowledge to others within their regions and globally.

Investigating the causes of childhood cancer: environmental risks and lifestyle and early-life factors
IARC is also investigating the causes of childhood cancer and related risk factors, such as environmental exposures, lifestyle factors, and diet.
In collaboration with partners in several countries worldwide, IARC scientists are using blood samples collected at birth to produce molecular maps of the DNA of newborn babies, before the development of disease. Each map enables scientists to create a molecular snapshot – a sort of diary – of early-life factors that the baby had been exposed to during pregnancy.

**Capacity-building and research to improve childhood cancer care: the role of nutrition in childhood cancer prognosis**

Together with the International Initiative for Pediatrics and Nutrition (IIPAN), IARC aims to implement a global strategy to build clinical capacity and advance research in the context of malnutrition and cancer in children in low- and middle-income countries. Scientists will monitor the lifestyle and nutritional status of more than 5000 children and adolescents with cancer in different low- and middle-income countries. A similar project is being launched in high-income countries, where overweight and obesity are highly prevalent in children and adolescents. This information resource will provide abundant opportunities and resources for answering research questions related to the impact of nutrition and other lifestyle factors on cancer progression and prognosis, as well as late effects.

**The first WHO Classification of Tumours volume on childhood cancers**

IARC, together with worldwide experts in childhood cancer, is preparing the first volume of the WHO Classification of Tumours series to specifically focus on the classification of paediatric tumours, to help clinical specialists diagnose and treat children with cancer.

**For more information, please contact**

Véronique Terrasse, Communications Group, at +33 (0)6 45 28 49 52 or terrassev@iarc.fr or IARC Communications, at com@iarc.fr

The International Agency for Research on Cancer (IARC) is part of the World Health Organization. Its mission is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control. The Agency is involved in both epidemiological and laboratory research and disseminates scientific information through publications, meetings, courses, and fellowships. If you wish your name to be removed from our press release emailing list, please write to com@iarc.fr.