Childhood Cancer: Descriptive epidemiology, Risk Factors and Research Challenges.

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This presentation will start with a brief synopsis on the global descriptive epidemiology of childhood cancers and provide an overview on procedures and main results of the IARC Monographs programme identifying carcinogenic hazards to humans and the IARC Handbooks of Cancer Prevention identifying what works in cancer prevention. The focus will be on agents with important evaluations on childhood cancer, such as ionizing and non-ionizing radiation, parental smoking, benzene and other environmental and occupational exposures for the Monographs and avoidance of body fatness for the Handbooks. Future plans for the Monographs and Handbooks programmes including the planned Advisory Group to Recommend an Update to the Preamble and the Advisory Group to Recommend Priorities for the IARC Monographs will provide opportunities for input from the wider scientific and public health communities.

Given the relatively few conclusive classifications to date, the final part will explore particular challenges in the causal inference linking environmental exposures to childhood cancer, such as exposure assessment, latency, and relative rarity of childhood cancers. Research options in childhood cancer epidemiology (cancer registries, analytic study designs), taking into account evidence on cancer in experimental animals and use of mechanistic data for prioritisation will be explored and supplemented with examples of recent studies.