



## MAIN MESSAGES — EARLY CHILDHOOD DEVELOPMENT

Early childhood is an extremely sensitive period in human development. Young children chronically exposed to adversity, such as family poverty, inappropriate care, and child maltreatment, are more likely to experience a broad range of impairments later in life.

Early adversity and later developmental health are linked through the development of brain systems regulating emotion, attention, self-control and stress. These brain systems are governed by a dynamic interplay between nature (genes) and nurture (environment), and influence developmental trajectories that can be further amplified through a cascade of exposures to stressful and risky contexts. These pathways extend to the regulation of future parenting.

There is no single path from early adversity to poor developmental health; young children vary in their response to adversity, and some may be more predisposed to respond to both stressful and nurturing environments. Genes listen to the environment, and their expression may be partly influenced by experience. Future research will tell to what extent early experience becomes embedded in the biology of the human brain to influence future developmental trajectories.

This report outlines an emerging science, which integrates genetics, epigenetics, neuroscience and developmental science, that will transform our knowledge of early childhood development by providing a deeper understanding of how the environment and biology are intertwined to influence development over the life course.

There is a strong case for focusing on the early years to break the cycle linking early adversity with negative outcomes. Child maltreatment and its associated outcomes can be reduced if specifically targeted, intensive and sustained services are deployed. Unfortunately, we do not yet have the same credible evidence on how broader, community-level interventions might mitigate childhood adversities in ways that would improve long-term developmental outcomes.