Connecting Early Childhood Development and Lifelong Health in a COVID-19 World

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Protecting Our Children: COVID-19’s Impact on Early Childhood and ACEs
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COVID-19 Through an Early Childhood Lens

Disparities associated with poverty, racism, and other structural inequities are not new—but striking variations in susceptibility to illness and response to treatment underscore the differential impacts of adversity on health.

The health and well-being of young children is inextricably tied to the health and well-being of the adults who care for them.

Pre-existing medical conditions that impose the highest risk for adults are associated with greater adversity early in life.
21st-Century Science is Deepening our Understanding About the Origins of Disparities in Early Development and Lifelong Health

- Connecting the Brain to the Rest of the Body
- Variation in Sensitivity to the Environment
- Timing & Critical Periods
The Biology of Adversity and Resilience Explains How Excessive Stress Can Undermine the Foundations of Healthy Development

Genetic Variation

Environmental Stressor

Time

Heart rate & blood pressure

Inflammation

Metabolic regulation

Stress hormones

Brain circuitry & electrical activity

Epigenetic effects on gene expression & developmental pacing

Learning, Behavior & Health
Early Childhood Investments that Protect Biological Systems from Toxic Stress Will Generate a Larger ROI

3 of the 5 Most Costly Adult Diseases are Associated with Early Life Adversity

- Cardiovascular Conditions #1: $294 billion
- Diabetes #2: $189 billion
- Depression #5: $99 billion

Annual Cost

$300 billion
$250 billion
$200 billion
$150 billion
$100 billion
$50 billion

Take-Home: Science-informed investments that reduce hardships and adverse exposures faced by pregnant women and families raising young children offer a promising pathway to enormous savings in health care costs.

Sources: Waters, Graf (Milken Institute, 2018); Greenberg et al. (2015)