The Impact of Toxic Stress on ACEs

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Toxic Stress

- Definition: Toxic Stress can occur when a child experiences strong, frequent, and/or prolonged adversity—without adequate adult support that activates the stress response systems.
Toxic Stress

• ACE score: the probability of toxic stress occurring

• Not clinically quantifiable

• Causes vary and some can be mitigated
ACEs Across Income

- 61.9% below 200% of Federal Poverty Line have at least one ACE

- 46.3% of children had at least one ACE

- 31.9% below 200% of FPL had 2 or more

- 9.2 above 400% of FPL had 2 or more
ACE Across Race

Black Children
- 12.7% of population
- 17.4% of population with ACEs

White Children
- 51% of population
- 46% of population with ACEs

Framework

Fig. 2. Tolerable stress household.
Positive or tolerable stress builds resilience and properly calibrates a child’s stress-response system. Toxic stress is caused by extreme, prolonged adversity and the absence of a supportive network. Negative stress effects mitigated by protective relationships.

Overall Stress Context

Child Level

Health Outcomes

Social-Emotional Development

Cognitive Development
Brain Development

Supportive/Hostile parenting
Childhood stressful life events

Incomes to Needs ratio
Hippocampus development
Brain Development

Frontal and Temporal Lobe Explains 15% to 20%

Poverty ↔ Academic Achievement
ADHD

ACEs

ADHD

School Attainment
Test scores
Graduation Rates
Elementary Intervention

10-minute Stress intervention
Reduced anxiety right away and a year later

• Small sample size, but implementation was feasible
Trauma Sensitive Schools

• Very little empirical evidence
  – Iterations vary greatly.
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• Implementation is key
  – Bottom up support
  – Leadership: teachers
  – Integration and acceptance into curriculum
  – Missouri’s framework – continuum of change
Reduction in Achievement Disparities
Reduction in Achievement Disparities

?%
Questions?

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