



WHAT HAPPENS WHEN BABIES AND TODDLERS FACE ADVERSE FAMILY CIRCUMSTANCES?

A growing body of research on brain development connects adversity to toxic levels of the "stress hormone" cortisol. Unlike children with normal cortisol patterns that peak early in the day and decrease steadily until bedtime, children in families facing adversity have cortisol levels that are constantly elevated.



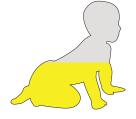
A CONSTANT HIGH LEVEL OF CORTISOL CAN HAVE DEVASTATING EFFECTS ON A YOUNG

CHILD'S GROWTH AND DEVELOPMENT—including cycles of behavior challenges, school struggles, and troubled adulthood. For example, a study at Stanford University showed that toxic levels of cortisol decrease the size of the hippocampus, a brain structure important in memory processing and emotion. Other studies link elevated cortisol levels to depression, PTSD, anxiety, antisocial behavior, and increased risk for drug and alcohol abuse.



► POSITIVE

Brief increases in heart rate, mild elevations in stress hormone levels.



TOLERABLE

Serious temporary stress responses, buffered by supportive relationships.



► TOXIC

Prolonged activation of stress response systems in absence of protective relationships.

How do we prevent developmental delays and avert chronic health concerns?

SCIENCE-BASED EARLY INTERVENTION



PILOT PROGRAM: ATTACHMENT BIO-BEHAVIORAL CATCH-UP (ABC)

ABC is an intervention proven to regulate infant/toddler cortisol levels—and help them thrive for a lifetime.

WHAT IS ABC?

- Teaches caregivers of children between 6 and 24 months old play-based strategies that build attachment
- Consists of 10 one-hour sessions at a family's home, delivered by a parent coach who observes interactions between parent and child and provides feedback on nurturing behaviors
- Measured by School of Social Welfare at KU through evaluation of cortisol levels in child saliva samples pre- and post-program
- Developed by the University of Delaware and replicated extensively with consistent positive results

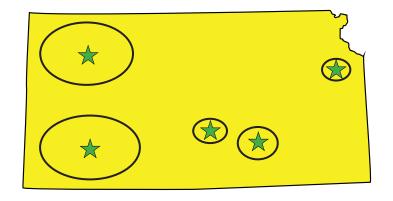
A 3-YEAR, \$2.4 MILLION PROJECT ACROSS 35 KANSAS COUNTIES

SITES:

- Horizons Mental Health Center
- Northwest Kansas Council on Substance Abuse
- Project Eagle
- Rainbows United
- Russell Child Development Center

ABC FUNDING PARTNERS:

- United Methodist Health Ministry Fund
- REACH Healthcare Foundation
- Hutchinson Community Foundation
- · Kansas Health Foundation
- Wyandotte Health Foundation



RETURN ON INFANTS (ROI)

\$7-\$10

Return

Investing in evidence-based early interventions pays off long-term for Kansas. Early childhood interventions like ABC not only make good economic sense, they make a difference for individual families through empowering them to raise happy, healthy kids.

High quality early interventions lower the impacts of Adverse Childhood Experiences (ACEs) and show a return on investment of 7:1.

\$1 Investment



From HS graduation and higher education



Increased tax revenue

From HS graduation and higher education



Reduced health care and mortality costs

- Reduced smoking costs
- Reduced depression costs
- Reduced drug treatment costs



Public system savings

- K-12 system savings for reduced need for special education and grade retention
- · Justice system savings from reduced crime
- · Reduced need for public assistance
- Child welfare system savings from reduced child abuse and neglect

GET INVOLVED

No matter your role, you have the ability to advocate for early childhood programs.

LEGISLATORS

- Dedicate the full amount of tobacco settlement revenue to early childhood programs
- Allocate TANF reserves for best practice interventions for low income young children
- Support implementation of diagnostic classification DC:0-5 for Medicaid reimbursement
- Advocate for ABC program to be incorporated into foster care and other existing early childhood programs as an "episode of care"
- · Get involved in local early childhood boards and initiatives

FOUNDATIONS

- Start community conversations around the value of early childhood programs
- Invest in evidence-based early childhood programs
- · Invest in sustaining and expanding the ABC pilot project
- · Establish an early childhood fund

BUSINESS COMMUNITY

- Get involved in local early childhood boards and initiatives
- Encourage public and private investment in science-based early childhood programs
- Donate individually to your local community foundation's early childhood fund—and establish one if it doesn't yet exist

EARLY CHILDHOOD ORGANIZATIONS

- · Refer families into the program
- Transition to use of evidence-based programs—especially short episodes within existing programs
- Educate policymakers and business leaders on value of evidence-based early childhood programs
- Recruit community and business leaders to serve on your boards