

# ACE NASHVILLE:

## Templates for Resilient Organizations



**ACE Nashville:** A collective impact initiative that is using a public health approach to prevent and mitigate childhood adversity and improve the health, safety and prosperity of all Nashvillians.

**Templates for Resilient Organizations:** Step by step guide, training and ongoing consultation to private and public entities in Davidson County seeking to translate the science behind the ACEs research and the BSB 'core story' into trauma informed organizational policies, operations, services and practices and resilient systems



### Highlights from Templates for Resilient Organizations:

Leverages existing statewide investment and messaging from the Three Branches Institute and the Tennessee Commission on Children and Youth's Building Strong Brains "core story" and "master" slide deck

Facilitates public engagement and professional and work force development in trauma informed organizational and practice change

Offers practical, tiered approach to training, ongoing consultation and peer support from ACE Nashville members on trauma informed policies, operations, services and practices

Provides in person training on the Building Strong Brains 'core story', the ACEs research, the impact of trauma on early childhood brain development, and the capacity of protective factors and safe, stable and nurturing relationships and environments to promote individual, family and community resiliency

Promotes implementation of reflective supervision and self-care in trauma informed care organizations

Includes assessment tools for baseline and periodic measurement toward organizational goals for trauma informed care

Includes sample core values, policies, procedures and training specific to organizational leadership, communications, relationships and resiliency.

Alexine L. Batts, LPC-MHSP, NCC; Lori Myers, LCSW, RPT-S; ACE Nashville Trauma Informed Care Workgroup; **Templates for Resilient Organizations**; 2018

### Benefits of resilient systems:

- Organizational engagement goes up 33%
- 24% decrease in absences.
- 13% lower turnover
- 39% increase in staff satisfaction
- 73% increase in morale
- 20% increase in productivity.
- 20% increase in revenue.

From: Bennet, M. (2016). Trauma-Informed Excellence; Coldspring Center for Social and Health Intervention; [www.coldspringcenter.org](http://www.coldspringcenter.org)

### On the horizon



**Resilient Tennessee:** a partnership between ACE Nashville and at the University of Tennessee's College of Social Work to promote workforce development, grounded in evidence-based science and resilient organizational practices, to maximize the physical and psychological safety of both clients and staff, facilitate recovery of the child and family, support individual, family and community resilience, and ultimately prevent and mitigate ACEs in communities throughout Tennessee



# THE HEALTH CARE PROVIDER ACE EDUCATION PROGRAM AT BAPTIST MEMORIAL HOSPITAL FOR WOMEN



## PROGRAM GOALS

The goal of the program is to target MDs, nurses, social workers, and other allied health professional for education regarding ACEs and their impact on the health and well-being of children. The program was started as a way to increase trauma-informed care in the Baptist Medical Group and affiliated physicians, along with other physicians in the community who receive the education. Other goals include preventing and mitigating the effects of ACEs on children by teaching physicians how to screen for ACEs in their office practices and providing a seamless referral to the Universal Parenting Places for counseling for those affected families.

## TOOLS

This program created a three minute ACE education video for the general public that physicians can use in their office practices to educate patients and families on ACEs prior to screening. This program also created print materials for physician and allied health professionals that providing information on ACEs, coaching for how to have an ACE discussion with patients, and patient-facing materials containing information on the Frameworks metaphors. We are happy to make these tools available the day of the Summit for attendees to see.

## IN FIRST 2 YEARS OF GRANT:

### Deliverables Met (all):

- Educational Materials (print and live) - contracted with Hemline Marketing to create printable and video educational materials
- 5-10 Physician Champions to present information - recruited 12 to be part of UPP Physician Advisory Board
- ACE educational seminar for MDs and health professionals - completed with Dr. Rowe and ACE Symposium in 2018
- ACE educational seminar for Baptist students - completed w/Paige teaching, then created 3 credit hour curriculum with partnership with Baptist College of Health Science professors
- ACE educational seminar for MDs with national experts - completed April, 2018

Survey re: impact of ACE awareness on patient interaction for MDs and health professionals

- completed after multiple training sessions

ACE screening buildout in EPIC – the Baptist electronic medical record – with ACE screening in two pilot physician offices, one pediatrics and the other OB/GYN

## TASKS COMPLETED (ALL):

- Offer intense sessions on ACEs & brain science to health professionals - completed w/live sessions, made CEs available for multiple specialties, and made web-based learning via Healthstream available also through creation of 2 learning modules
- Educate local health professionals about how ACEs affect all aspects of life, infant to adult - in addition to training events both web and live, we are training all new Baptist employees in new employee orientation
- Give MDs tools and skills needed to speak to parents about ACEs - Hemline Marketing materials and video
- Create educational opportunities w/Baptist College of Health Sciences to learn about ACEs - BCHS curriculum created for full three credit college course
- Work with Knowledge Quest to involve local community resources that have a focus on mental health
- Provide messaging and metaphors aligning w/Building Strong Brains
- Ensure brain science of ACEs is easily understood by the public - made video available to patients/parents
- Teach MDs Frameworks metaphors for toxic stress
- Produce educational materials (print and live)
- Develop an ACE educational seminar that can be implemented in a college course of study
- Recruit 10 pediatricians and/or Ob/GYNs to include the ACE questionnaire in their medical records - purchased iPads and piloted screening at 2 locations; also worked with EMR (EPIC) system in Baptist to make referrals automated, minimizing physician time

## OUTCOMES

- All 915 employees of Baptist Women's Hospital will be trained on ACEs August 15, 2018
- Over 1800 health professionals have been trained in live and virtual formats in over 30 live training events.
- Baptist ACE Symposium held in April 2018 with national experts

MDs trained/familiar w/ACEs should:

- Include key ACE risk questions in initial medical assessments

## FUTURE

- Push ACE education out to other Baptist hospitals and entities
- Incorporate ACE screening in more Baptist Medical Group office practices
- Create educational opportunities with UT College of Health Sciences & Vanderbilt to learn about ACEs
- Make educational opportunities available to non-Baptist/ Shelby Co MDs and health care professionals





# BETIP: BELMONT'S EDUCATING TRAUMA INFORMED PROFESSIONALS PROJECT

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Gordon E. Inman College of Health Sciences and Nursing  
Belmont University



## Background

- Adverse childhood experiences (ACEs) are linked to negative mental and physical health outcomes in adulthood<sup>1,2,3</sup>
- More than 40 percent of Tennesseans have experienced 2 or more ACEs<sup>4</sup>
- Providers in community and primary care settings can effectively address ACEs<sup>5,6</sup>
- There are no standardized trauma informed care training models to guide education for the next generation of health and social welfare workers

## Goal

- Create an interdisciplinary, evidence-based trauma informed care (TIC) curriculum for undergraduate and graduate health sciences students.
  - Identify gaps in new graduate and existing provider knowledge about ACEs
  - Work with FrameWorks and other content, messaging and innovative curriculum experts
  - Identify and support faculty champions to develop and lead curriculum integration

## Methods

- Year 1:
  - Review TIC evidence
  - Undergraduate Curriculum Map (Nursing, Social Work, Public Health)
  - Stakeholder survey to identify training gaps and input for TIC training content
  - Standardized ACEs/TIC training for Belmont College of Health Sciences & Nursing Faculty
  - Develop & pilot 3 cross-disciplinary, TIC modules
- Year 2:
  - Establish ACEs Resource Center at Lila Bunch Library
  - Identify Graduate Faculty Champions
  - Graduate Curriculum Map (Nursing, OT, PT)
  - Stakeholder conference
  - Focus on Interprofessional Education
    - Trust-based Relational Intervention Model
    - Poverty
    - Simulation & Case Studies (<https://youtu.be/8zH5Z05xaLA>)

## Findings

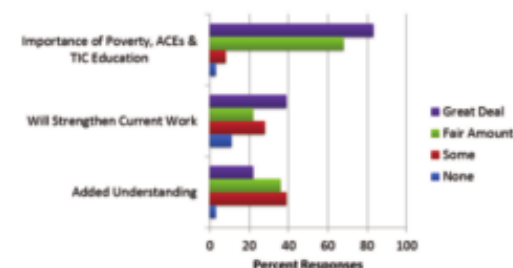
- At baseline, less than 10 percent of existing courses contained specific ACEs content
- More than half (n=294) of undergraduate and graduate students participating in ACEs training
  - Rated ACEs/TIC content as very important
  - Increased knowledge of ACEs science and TIC practice
  - Increased anticipated use of ACEs and TIC concepts
- More than half (n= ~500) of health, social welfare and education professionals and other community stakeholders participating in ACEs training
  - Gained new knowledge about ACEs
  - Stated increased desire to know more about ACEs
  - Planned to use what they had learned to network with other professionals and to influence existing policies or practices
- Be prepared to address "triggered" responses among ACEs training participants
- A standardized training "toolbox" can be useful, but standardized modules require modification for integration into existing coursework
- Challenges
  - Track and measure interest and activity
  - How to standardize & scale ACEs/TIC education to other academic settings



## Findings

### 2018 BETIP/Stakeholder Conference Evaluation

n=100



## Next Steps

- Assess ACEs content integration into courses
  - Discipline- and graduate/undergraduate- specific
  - Interprofessional educational activities
  - Simulation
- Establish graduate student ACEs Fellowships
- Expand ACEs/TIC training Toolbox and make more widely available

## References

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# Building Strong Brains Tennessee Strategic Plan Overview



*Building Strong Brains* works to change the culture of Tennessee so that the state's overarching philosophy, policies, programs and practices for children, youth, and young adults utilize the latest brain science to prevent and mitigate the impact of adverse childhood experiences.

Creating a trauma-informed culture requires a shift in philosophy, policies and funding, programs, and professional practice from every sector.



## Vision For Success:

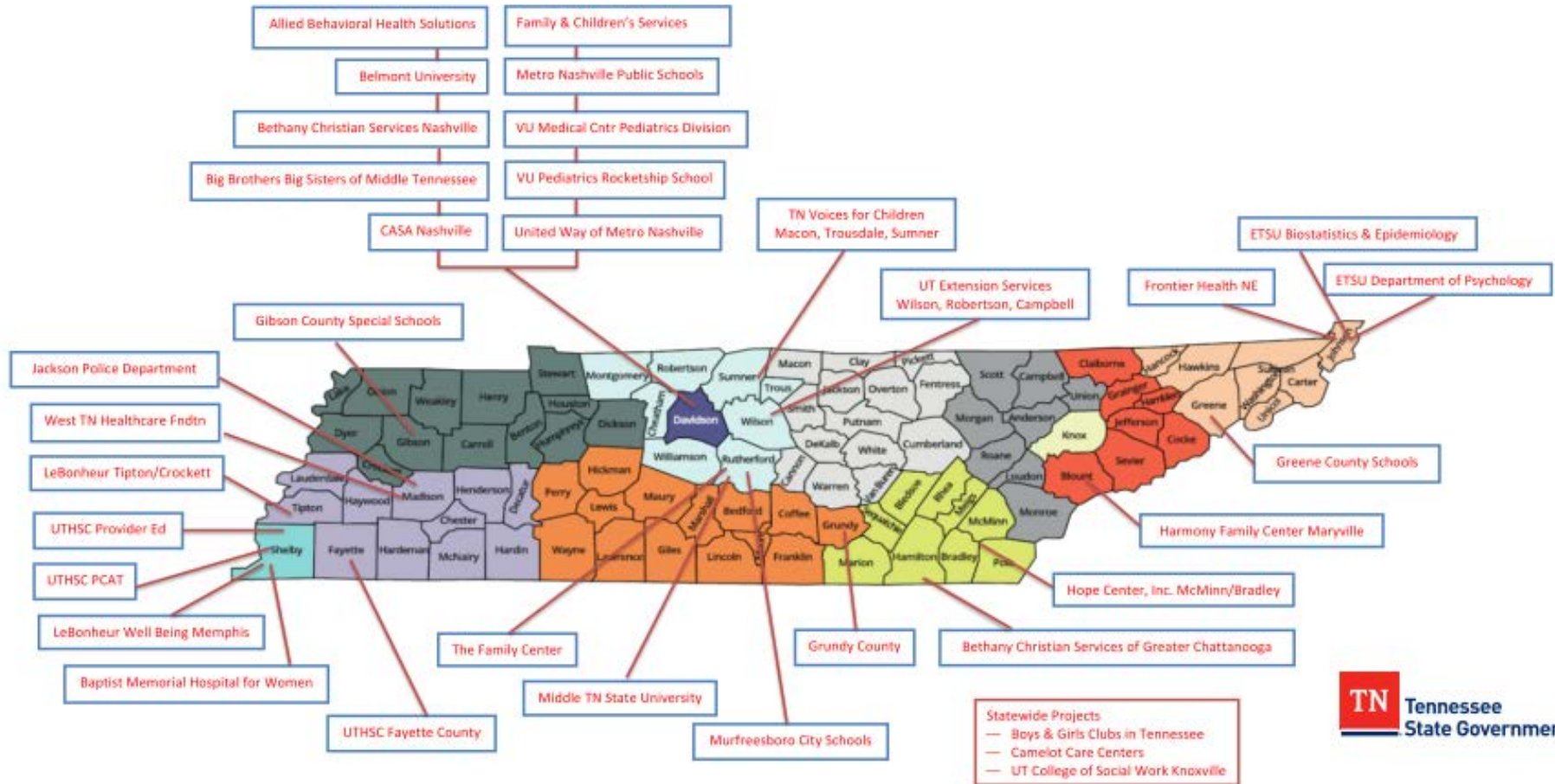
- Competent, Committed, Inspirational Leaders at All Levels
- Broad Community Engagement
- Formalized Infrastructure Support
- A System to Collect Data, Analyze and Share Results
- Common Practice Implementation
- Universal Awareness and Commitment
- Targeted System Specific Marketing Strategies
- Business Engagement, Advocacy, and Investment

To realize our mission and vision, we will focus on strategic priorities that engage people in this work, equip them with tools and training, connect them with information and shared learnings, and support them as they develop systems and strategies to become trauma-informed.



# BUILDING STRONG BRAINS TENNESSEE

FY19 Funded Community Innovations

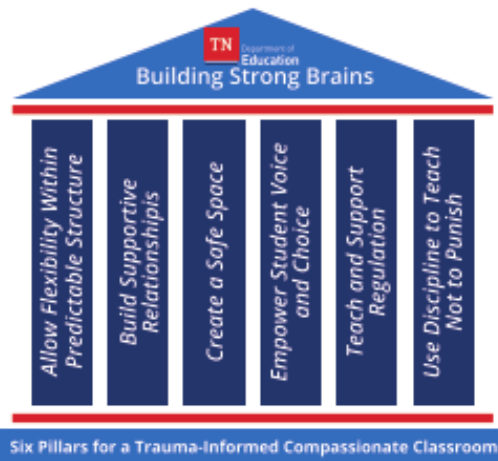


**TN**Department of  
**Education**

# Building Strong Brains: Strategies for Educators

**OUR GOAL**

Empower school leaders and teachers to address adverse childhood experiences (ACEs) and trauma in the school and classroom settings.

**Success Story #1:**

5,000 Tennessee educators have participated in training for Building Strong Brains: Strategies for Educators. Overwhelmingly, educators said that learning to respond versus react to students affected by ACEs was the number one takeaway.

## The Six Pillars of a Trauma Informed Compassionate School

Enable schools to fully implement evidence based trauma-informed practices to support students affected by ACEs.

**Success Story #2:**

In July, 2018 the Department of Education offered an exciting opportunity for schools to become a model trauma-informed school. Selected schools will receive high-quality training, resources, and ongoing support and recognition as they implement trauma-informed practices.

## Purpose

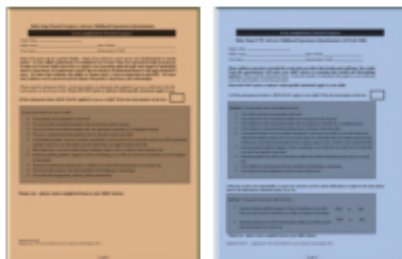
Establish an existing clinic as a *Trauma-Informed Care Pediatric Clinic and Medical Home* in Johnson City, TN. Through screening and identification of ACEs (adverse childhood experiences), intervene to prevent ACEs and their effects on children and their families.

## Methods

- ❖ Project Period: October 1, 2017-June 30, 2018
- ❖ Population served: Children from birth to age 5 years and their families
- ❖ Setting: Pediatric clinic in Northeast Tennessee
- ❖ Disciplines involved: Pediatrics, Nursing, Social Work, Psychology
- ❖ Unique aspects of delivery: Personnel from the *Northeast Regional Health Office and Families Free*, a licensed substance abuse and mental health treatment center, were integrated into the pre-existing integrated care team at the clinic, sharing an electronic health record.
- ❖ Activities: (1) Screeners and an educational flyer were printed, (2) Clinic staff were trained in ACEs and Trauma-Informed Care, (3) EHR (Allscripts) was programmed to record screening and referral results, (4) Screening, brief intervention, and referrals were initiated, (5) Results were tracked and discussed in weekly huddles.

## Results

Screening occurred 3/1/18-6/7/18. A total of 162 screeners were administered to families with children 5 years and younger. All families screened received brief education and our flyer on ACEs and building resilience.



**Figure 1:** Screeners adapted from the Center for Youth Wellness for use among families with children 5 years and younger.

## Results



All families seen during this period for well child visits were provided with *ReadNPlay for a Bright Future* materials and *Reach Out and Read* books, and were connected to *ReadNPlay* family community events. Ecomapping and additional resources were provided by our integrated behavioral health and social work team in the clinic as indicated.



**Table 1:** Screening Results in Parents/Caregivers and Children

	Parents / Caregivers (n=96)	Children (n=66)
ACE score = 2+	53.1%	9.1%
ACE score = 4+	37.5%	3%

- ❖ Parents with an ACE score of 2+ were offered *The Incredible Years* during well child visits in the first 9 months of life.
- ❖ Parents or children with an ACE score of 4+ were invited to participate in the *Baby Steps Community Program* to receive home visits from *HUGS* and individual visits for 10 hours of *Nurturing Parenting* from *Families Free* (23 families participated).

## Results

**Figure 2:** Educational flyers developed by the project team.



**Figure 3:** Patients handouts describing available resources.



## Conclusions

- ❖ Results suggest that parents in this clinic are more likely to have an ACE score of 4 or higher than adults in the original ACE study (37.5% vs 16.6%) or in the Tennessee BRFSS (estimated that 20% of residents have an ACE score of 3 or higher).
- ❖ A significant percentage of our young (1-5 years old) patients were reported to have an ACE score of 2 or higher (9.1%). These data suggest a need for continued screening, education, and intervention, as well as documentation of program outcomes.
- ❖ Opening the conversation about high screener results with the question, "How are these past experiences affecting you and your child now?" has been useful to gauge interest in resources and guide the conversation about ACEs.
- ❖ Although our *Building Strong Brains* grant has ended, we found screening to be feasible to expand clinic-wide using electronic screeners in CHADIS. We will screen parents/caregivers at the 1 month visit and parents/caregivers and children at the annual well child visits beginning at 1 year of age.
- ❖ In addition, we will conduct our planned project evaluation to collect feedback from parents and providers on the program and continue to disseminate our experience in the region.

## Acknowledgements / References

This project was funded by a FY2018 Building Strong Brains grant. The data collection protocol was reviewed and approved by the ETSU Institutional Review Board. For questions, please contact Dr. Karen Schetzina at [schetzin@etsu.edu](mailto:schetzin@etsu.edu).



This project was designed as a research study to empirically test the effects of a trauma-informed care (TIC) demonstration project at the Boys & Girls Club of Johnson City/Washington County (B&GC). This was one of the first empirical investigations in the nation using Trauma-Informed Care (TIC) to reduce Adverse Childhood Experiences (ACEs) and their effects; however it was not completed because funding ended after 8½ months.

Our project had two parts. The first was the organization-wide implementation of trauma informed care (TIC) at the Boys & Girls Club of Johnson City/Washington County (B&GC). The second was a randomized controlled trial to determine whether ACE/TIC information can be taught to caregivers (parents/guardians) of children who attend the B&GC and whether that training causes changes in the caregiver/child interaction, and whether it causes positive changes in the child. In our first 8.5 months of this project (the length of funding), we were able to train all B&GC staff in trauma-informed care principles, and those principles are now used throughout interactions at the Boys & Girls Club. We completed training curriculum for staff and for caregivers. We were able to construct a Quiet Room, and began the randomized controlled trial (RCT) testing the effectiveness of caregiver ACE/TIC training. If we had been able to complete this study, we would have been able to experimentally verify whether teaching caregivers about ACEs and TIC principles increases caregiver understanding of ACEs and whether it affects caregiver/child interaction and child outcomes such as absenteeism, school performance, and behavior

### ASPECTS OF THE PROGRAM:

**TIC Training.** In this project, all **paid and volunteer staff were trained and coached by an onsite trauma-informed care (TIC) project director in the concepts of TIC** with a **manualized training program** that was developed for this project. All staff members at the location were trained in Trauma Informed Care, and given pre and posttests to ensure that the material was learned and retained.

**Quiet Room.** A practice that has been found to be effective in other settings is creation of a safe space to de-escalate situations in which someone (e.g., child, parent, staff member) is angry or upset. We **constructed a Quiet Room** at the B&GC for this purpose.

**Caregiver Training.** **Caregiver Training** is a manualized parenting program that infuses TIC principles and information about the outcomes associated with ACEs. It was offered in one 2-hour session to a randomly selected group of 30 parents/guardians of children at the B&GC.

**Comparison Groups.** Caregivers were to be compared with caregivers who had received a placebo class or who had not participated in either class on surveys and in video recorded interactions with their children.

#### Number of people trained in Trauma-Informed Care

- Staff: 21
  - Full-Time: 5
  - Part-Time: 16
- Caregivers: 5
- How many children interacted with people trained in TIC? 134



Group Assigned	Total n	Able to Contact	Caregiver Consented	Pretest	Attended Training	Posttest	Scheduled Observation	Child Assented	Completed Observation	Completed Post Observation Survey
ACE/TIC Training	51	23	2	2	2	2	0	0	0	0
Control Training	49	29	3	3	3	3	2	2	2	2
Untreated Control	86	30					2	1	1	1
<b>Totals</b>	<b>186</b>	<b>82</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>

### FINDINGS:

- We were able to verify that staff knowledge of trauma-informed care improved significantly from before training to after training.
- Staff and children indicated that the Quiet Room was beneficial for de-escalating emotionally tense situations (use peaked in April – it was new; and misbehavior peaked in April – tracking improved).
- We were not able to study enough caregiver/child pairs to determine whether caregiver training improved caregiver child/interaction.



# DISCOVER TOGETHER IS BUILDING STRONG BRAINS IN GRUNDY COUNTY, TENNESSEE



**Grundy County:**  
Tennessee's unspoiled playground!



But it is not all fun and games here.



## Timeline of Progress:

2016/2017 School Year: First year of ACES Intervention

### First year, second quarter:

- \* Community Ambassador(CA) trained on attendance software and started caseload with 63 students chronically absent previous year
- \* Checks Pre-K thru 3rd absences; attendance protocol wasn't being followed
- \* Presents at in-service training to explain CA's role; 5 families become actively engaged with CA

### First year, third quarter:

- \* In effort to make contact, greets parents with trauma informed messages in front office and parking lot
- \* Families begin to seek out the CA; More interactions with staff regarding students;
- \* CA begins attending Attendance Review Board meetings and assists Supervisor with data system
- \* Ms. Hedy Chang, Executive Director of Attendance Works, provides in-service with district school personnel
- \* CA actively engaged with 24 families

### First year, fourth quarter:

- \* Referrals for healthcare, transportation, housing, counseling, and other supports. Correct contact information remains an issue
- \* Monitor attendance during last month of school proves futile.

School releases attendance data for 2016/17 in comparison with previous year:

"School Year 2015/16" (year prior to ACES intervention) Tracy City Elementary Chronic Absentee Rate: 29.91%

"School Year 2016/17" (first year of our intervention) Tracy City Elementary, Chronic Absentee Rate: 17.86%

"School Year 2017/18" Tracy City Elementary, Chronic Absentee Rate: 13.73%

2017/2018 School Year: Second year of ACES Intervention

### Second year, first quarter: The Community Ambassador

- \* Makes calls upon first absence ; CA follows up with students who did not re-enroll
- \* Works closely with School nurse to acquaint families with the benefits of the new Telehealth program
- \* Actively engaged in parent education explaining the role of good stress vs bad stress

### Second year, second quarter:

- \* Attends truancy court; networks with Juvenile Judge; DCS; counseling services; probation officers, etc.
- \* Observes much improved communication with school personnel

### Second year, third quarter: The Community Ambassador

- \* A simple breakthrough occurs when CA is given an office in administrative suite
- \* Now actively involved in truancy court, acting as advocate for families ; arranges services and resources
- \* Attends additional ACES training and is a certified trainer for Youth Mental Health First Aid

### Second year, fourth quarter: The Community Ambassador

- \* Worked with School personnel on new tiered attendance policy, awaiting school board approval
- \* Pre-K through 3rd grade students, modeling CA, are now encouraging each other to come to school
- \* One particular child was absent 10 days this year. Not great, but we celebrated! She was out 46 days in 2016/17!

In 2015/16 school year, of the county's six elementary schools, Tracy City Elementary had the highest rate of chronic absenteeism, at 29.91%.

Tennessee Department of Education. (2016, February). Chronic absenteeism in Tennessee's early grades. Retrieved from: [www.tn.gov/content/does/education/reports/chronic-absenteeism-early-grades.pdf](http://www.tn.gov/content/does/education/reports/chronic-absenteeism-early-grades.pdf)

Discover Together programming will target a statewide problem (chronic absenteeism) and implement mitigation strategies with families, boosting attendance and reducing absenteeism as one path toward reducing the impact of adverse experiences in early childhood.

**Discover Together**  
*An Innovative Partnership*  
Scholastic, Yale Child Study Center, Sewanee: The University of the South, and the community of Grundy County deliver 2 Generation interventions designed to build capacity among children and their caregivers to create positive social networks through literacy-based interventions—ultimately fostering resilience.



# TRAUMA-INFORMED PRACTICES IN SCHOOLS: BUILDING STRONG BRAINS IN METRO NASHVILLE PUBLIC SCHOOLS

(In partnership with the Tennessee Building Strong Brains Initiative, Tennessee Commission on Children and Youth, and the TN Department of Education)



## Why is this an Educational Problem?

- ACEs in schools are:
  - Prevalent
  - Universal, though some are at higher risk
  - Often an invisible epidemic
- Teachers and schools are often the first line of defense, and educators have tremendous power to:
  - Further distress, perpetuate adversity, or even re-traumatize at school,
  - or
  - Buffer the impacts of trauma

## Toxic Stress in the School Setting

"The neural pathways in the brain that deal with stress are the same ones that are used for learning. We, as a country, want our kids to achieve more academically, but we can't do this if our kids aren't emotionally healthy."

--Mark Brackett, director of Yale Center for Emotional Intelligence

## Trauma-Informed Schools Focus on:

- Shared Awareness between all staff about the impacts of adversity and stress, and trauma-informed school practices.

All students and stakeholders:

- **Feeling Safe**
  - Physically, emotionally, academically
- **Being Connected**
  - Relationship-rich environments
- **Staying Regulated**
  - Strategies to reduce stress and promote healthy brains
- **Learning**
  - Can be fun!

## Trauma-Informed Practices in Schools: Project Overview

Project goals:

1. Promoting widespread awareness through readily accessible training for all MNPS schools
  - The Role of Life Experiences in Shaping Brain Development
  - Trauma-Informed School Culture and Practices: Mitigating ACEs
2. Promoting trauma-informed school culture and practices
  - 1 Pilot and 10 Focus Schools
  - District-wide implementation of Handle With Care



## Promoting Widespread Awareness



Team of >70 MNPS BSB and Trauma-Informed Schools Trainers

- Train-the-trainer model in collaboration with Building Strong Brains
- To date, we've trained >9000 MNPS educators and community stakeholders
  - >100 whole school faculties
  - >50 MNPS departments
  - >50 Community presentations

## Handling MNPS Students with Care

(partnership with Metro Nashville Police Department)

- When a child is a victim of or witness to a potentially traumatic event that involved police, a law enforcement officer alerts the MNPS Trauma-Informed Schools Coordinator
- The Trauma-Informed Schools division provides the school with a Handle With Care notification that the student has faced a potentially traumatizing event, including suggested trauma-informed strategies
  - The school then "handles the student with care" according to individual needs
- >2250 notices were communicated during the 2017-18 school year

## Trauma-Informed Pilot School: Fall Hamilton Elementary

- The Leader in Me: 7 Habits
- Restorative approach
- Positive Behavior Interventions and Supports
- Morning Meetings
- School-wide Peace Corners
- Stress reduction practices incorporated into school day (Mindfulness)
- Peace corners
- Check In/Check Out Mentoring
- Student Success Center
- Focus on adult mindset and self-care
- Trauma Informed Practitioner on staff
  - Bounce Back (Cognitive Behavior Intervention for Trauma in Schools)



## 10 Trauma-Informed Focus Schools

- 10 schools committed to:
  - Ongoing ACEs training throughout the school year
  - School-wide implementation of two trauma-informed school practices:
    - Peace Corners
    - Twice-daily stress reduction activities focused on regulation and social emotional learning



## Project Outcomes: Comparison of Baseline Year to Implementation Year 1

School	Office Discipline Referrals Baseline - Year 1	Office Discipline Referrals Year 2 - Year 1
Fall Hamilton Elementary (Pilot School)	87% Reduction	52% Reduction
Eakin Elementary	72% Reduction	n/a
Waverly Belmont Elementary	29% Reduction	n/a
Maple Elementary (Elementary)	15% Reduction	n/a
Hermitage Elementary	60% Reduction	n/a
Inglwood Elementary	1% Reduction	n/a
Tulloch Elementary	52% Reduction	n/a
Missy Wagner Middle Prep	37% Reduction	n/a

# BUILDING STRONG BRAINS: ADVERSE CHILDHOOD EXPERIENCES (ACEs) INITIATIVE PROGRAM



The vision of Murfreesboro City Schools (MCS) is to focus on the whole child, assuring their success in a global community. Those few words encompass a great undertaking including academic, nutritional, medical, social, and behavioral needs. The Adverse Childhood Experience (ACEs) Initiative, funded by this extraordinary grant, allows MCS to further assist our students and their families.

The services and programs included in this project are based on an extensive body of evidence regarding multi-tiered levels of support and school mental health. The multi-tiered model, implemented by MCS, provides a theoretical and practical framework for increasingly intensive and individualized levels of care. When applied to school mental health, multi-tiered systems of support increase the likelihood that schools provide universal behavioral and social-emotional supports for all children (tier one), targeted intervention for children who require additional support (tier two), and intensive individualized intervention (tier three) for children who do not respond to tier one and tier two interventions. In this tiered approach, research shows that universal access to evidence-based behavioral and social-emotional interventions reduces the need for more intense behavioral health supports.

The services and programs included in this project promote prevention (tier one) and mitigation (tiers two and three) of ACEs. The initiative contributes to the district's ongoing efforts to increase trauma-sensitivity and the implementation of trauma-informed practices.

- This project promotes prevention of ACEs by educating school staff, parents, and community partners regarding childhood trauma and the impact of ACEs on children's physical and social development.
- As a prevention program, this initiative enhances social connections within the family and greater community as a protective factor against ACEs.
- This project helps mitigate the effects of ACEs by providing targeted and intensive small group intervention for students who are identified at-risk and then linking the students to available school-based and community services. Likewise, parents receive parent training and support and are linked with community partners to build positive social connections.

By promoting the prevention of ACEs and the mitigation of the impact of adverse childhood experiences, these services and programs improve academic success, improve physical and emotional health, increase parent-child interactions, and strengthen community social connections for Murfreesboro's students and their families.

## The BOUNCE BACK Program

### WHY

Chronic childhood trauma, known as adverse childhood experiences (ACEs), can disrupt a child's brain-building process.

Increasingly, children are experiencing stressful life events that can make it more difficult to succeed in school. The stresses can make it hard for children to concentrate and get along with family and friends. Many times, children do not talk easily about these events.

According to Research:

More than 25% of American youth experience a serious traumatic event by their 14th birthday and many children suffer multiple and repeated traumatic events.

Common sources of trauma include abuse, neglect, serious accidental injury, natural disaster, experiencing and witnessing violence.

- ACEs have been linked to:
- Early health behaviors
  - Chronic health conditions
  - Low life potential
  - Early death

### WHAT

The Bounce Back Program provides students with an opportunity to participate in small group sessions over a ten-week period. During the small group sessions, students learn how to respond to stressful events, make healthy decisions, and express their feelings in a positive manner.

This program is open to any Murfreesboro City Schools student who has experienced an adverse life event. Parents and teachers may refer a student to participate in the program.

### HOW

Murfreesboro City Schools is committed to reduce and respond to the negative impact of ACEs by:

working with children in small group settings to increase their ability to cope with stressful life events;

educating caregivers about the impact of stress on child development;

helping families navigate stressful situations and connecting them to community resources;

training school staff regarding ACEs and the impact on child development and learning;

working with community organizations to increase awareness of ACEs and provide opportunities for community support.

*"Alone we can do so little; together we can do so much."*  
— Helen Keller

#### Child Satisfaction

In terms of your satisfaction with your participation in the Bounce Back Program over the past 3 months, how would you rate each of the following?



#### Parental Satisfaction with Bounce Back

In terms of your satisfaction with your child's participation in the Bounce Back program, how would you rate each of the following: Very Poor, Fair, Good, Very Good, Excellent, or Outstanding?



#### Child Satisfaction (Primary Grades)



# MTSU Project PEACE

## Professional Educators Understanding Adverse Childhood Experiences



### Outcomes

- Increased Awareness of ACEs among future teachers of children
- Increased awareness of ACEs among faculty and staff
- MTSU funded for another ACEs grant to work collaboratively across disciplines to embed ACEs material into coursework.
- Faculty and staff updating their practices to include information on ACEs and trauma informed care as they prepare future teachers.



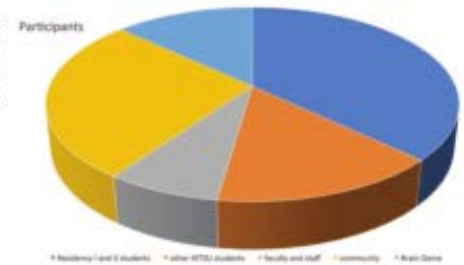
**Building relationships encourages understanding of a child's needs. We can not assume that everything is ok.**

*"Every child needs one person who is crazy about him."*

— Uri Bronfenbrenner



### Participants in ACEs Training



#### LOGIC MODEL: Project PEACE

#### Professional Educators understanding Adverse Childhood Experiences

Agency: Middle Tennessee State University, College of Education

Issue: MTSU Early Learning Programs support an average of 400 families each year served by 36 fullpart time staff. The MTSU College of Education enrolls nearly 250 future teachers, pre-K-12, in addition to future counselors and child care educators. Recognizing and understanding the impact of ACEs and strategies for reducing ACEs is crucial to the success of their work.

Inputs	Activities (Outputs)	Participants	Short-Term Outcomes	Medium-Term Outcomes	Long-Term Impact
Building Strong Brains TN-ACEs Initiative training resources	ACEs training of early learning program staff and families	MTSU ELP staff and families	MTSU early learning program staff are aware of TN-ACEs Initiative and how it applies to their work	MTSU ELP staff use ACEs resources to share with new families/teachers each year.	Children and families are supported by educators through understanding of issues that may impact their brain development as well as overall development.
The Brain Architecture Game-Center on the Developing Child	ACEs training seminar for students enrolled in Residency 1 and 2 (student and spring student teacher program teaching)	Approximately 250 students enrolled in fall and spring student teacher program	Students learn teachers- are aware of ACEs and have resources in their tool box when they begin their career as teachers	Future teachers reflect on student behavior with a sense of curiosity and wonder of "what has happened to the child?" rather than "what is wrong with the child?"	College students, faculty, teachers, and families recognize and understand the impact of ACEs and support the use of resources and changes in practices in order to reduce or minimize the long-term negative impact of ACEs.
College of Education Early Learning Programs (ELP) staff and families	Fall and Spring ACEs seminar	MTSU College of Education faculty and staff, students, families and general public	MTSU College of Education faculty and staff are aware of TN ACEs Initiative	College of Education faculty and staff have access to resources to use in their coursework as appropriate	
Office of Professional Laboratory Experiences	Fall and Spring seminar: The Brain Architecture Game				
College of Education faculty and staff					

#### Assumptions

ACEs training for ELP staff is approved by their licensing/funding entities. Student, parent, faculty and staff are not aware of ACEs Initiative and the available resources to support them in their work with children, students or families.

#### External Factors

Early Learning Programs staff are trained to attend 34-42 hours of training each year. Family engagement is a focus of our early learning programs. Faculty and staff already have required activities.



## The Brain Architecture Game\*

- Goal: Make the connection between early experiences in life and the effects they have on building the foundation for handling negative experiences in the future years.
- Our brains are amazing. Too often we don't think about how everyday experiences attribute to how our brains are hardwired during the first five years of life. Adults caring for children can control many of these experiences but some are just a luck of the draw or the roll of the die. Participants experience a hands on opportunity to explore the relationship between everyday life experiences and how to build a strong brain early in life and resilience for the future.

\*From the Center on the Developing Child at Harvard University



# BUILDING STRONG BRAINS TENNESSEE

## Creating a Trauma-Informed Culture in Tennessee through Knowledge Mobilization and Awareness

Tennessee Commission on Children and Youth | Richard Kennedy, MA [Richard.Kennedy@tn.gov](mailto:Richard.Kennedy@tn.gov)



### PURPOSE

Adverse Childhood Experiences (ACEs) harm the developing brains and bodies of children comprising the foundation for lifelong health. The ACE research has resulted in child abuse and neglect being acknowledged as a major public health problem and a leading cause of early death. From academic failure to alcoholism, from crime to cancer, presence of ACEs compromise the safety, tax dollars and quality of life for all Tennesseans.



Given that ACEs represent a critical public health issue, the Building Strong Brains Tennessee Coordinating Team identified that knowledge mobilization and public awareness strategies were necessary to support widespread understanding and culture change.

The Tennessee Commission on Children and Youth (TCCY) has overseen the development and execution of three public awareness strategies including a *Building Strong Brains Tennessee Training for Trainers Initiative*, a cadre of public awareness printed materials, and a 6-part docuseries educating the public on ACEs, early brain development, strategies to promote resilience, and the innovative work happening in the state to prevent and mitigate ACEs.

### POPULATION

Creating a culture shift in Tennessee requires that TCCY engage individuals from diverse backgrounds including trainers from rural and urban areas and trainers that represent an array of sectors, both public and private. Relying on TCCY Regional Councils, state partners, and private sector partners, we have prioritized training a diverse group of presenters and have been able to distribute developed print materials widely across the state.

#### Counties Where a Building Strong Brains Tennessee Training Has Been Conducted



\*Data based on submitted trainer reports and does not represent all training that has been conducted.

#### Counties Representing Community Members Who Have Received a Building Strong Brains Tennessee Training



\*Data based on community member surveys and does not represent all individuals that have been trained.

### PROJECT DESCRIPTION

#### Training for Trainers

Since October 2016, TCCY has conducted 28, 2-day Training for Trainer events to raise awareness and educate participants about brain development, Adverse Childhood Experiences (ACEs) and toxic stress, and strategies to prevent and mitigate ACEs. Participants were selected through a competitive application process that prioritized diversity, reach, and training experience.

The goals of these training for trainers events include:

- Use of consistent, evidence-based messaging that equip trainers to increase awareness of ACEs and their impact by teaching trainers to disseminate information about ACEs and their association with specific poor health outcomes as a first step in preventing ACEs and de-stigmatizing early childhood trauma
- Enhance the capacity of communities and the state to prevent and mitigate ACEs by prioritizing investments toward evidence-based prevention and intervention programming that supports children and families, promotes and funds evaluation of promising approaches, and supports community norms changes.

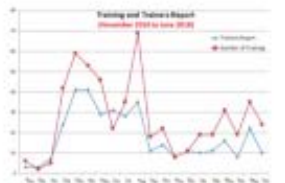


Nashville 2017



Columbia 2017

Participants are expected to deliver training in their communities and organizations on an ongoing basis. We also ask and expect each of the new trainers to send detailed reports of the trainings conducted, sponsoring organization, number of participants and participant evaluations for their trainings.



#### Learning Collaborative & Knowledge Mobilization Teams

After participating in a Building Strong Brains Tennessee Training for Trainers event, participants engage in a "learning collaborative" to promote ongoing professional development and translation of science into policy and practice. Basecamp, a web-based platform, is being used to organize communication, projects and document sharing. The platform will also support the work of sector-specific groups looking to develop strategies to prevent and mitigate ACEs.

In addition to the learning collaborative, TCCY's 9 Regional Coordinators are beginning to develop Knowledge Mobilization Teams across the state to support the development of trauma-informed communities. TCCY will work with the learning collaborative and the Knowledge Mobilization Teams in a dynamic way to expand awareness and translation of ACEs science into philosophy, policies and funding, programs and professional practice.

#### Public Awareness Materials

TCCY has developed print materials to aid in public awareness. To date, over 100,000 materials have been distributed across the state. These materials use the evidence-based messaging consistent with that in the Building Strong Brains Tennessee Training. Materials are being used to educate many different sectors including the faith community, business leaders, parents and educators.

### COMMON LANGUAGE

#### FrameWorks Evidence Based Communication



**Brain and return:** Interactions with adults are vital to building a solid foundation for healthy brain architecture.



**Toxic stress:** From prolonged exposure to adversity without adequate support impairs brain development and executive function.

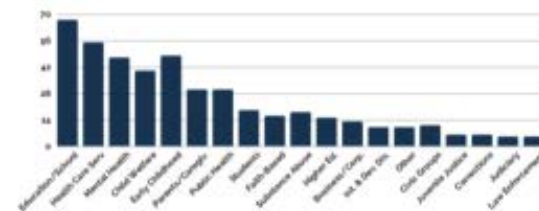


**Resilience:** which refers to a child's ability to counterbalance negative experiences, is built through safe, stable, nurturing environments.

### OUTCOMES

To date, **799** individuals have participated in Building Strong Brains Tennessee Training for Trainers events. Even with low reporting, these trainers report presenting to at least **24,000** community members.

Most common sectors: Education/Schools, Health Care Services, and Mental Health



Qualitative data we receive from trainers indicate that the training is influencing professional practice and leading to more interdisciplinary approaches to preventing and mitigating trauma. A baseline survey on public opinion in Tennessee about Adverse Childhood Experiences was conducted by The University of Tennessee Social Work Office of Research & Public Service in February 2017. A follow up survey will be conducted in Fiscal Year 2019 to determine if these public awareness efforts have resulted in increased familiarity with ACEs among Tennesseans.

### OPPORTUNITIES

Though current efforts have increased awareness, trainers, advocates and providers across the state continue to indicate a need for training and public awareness, particularly in rural communities. Additional opportunities to improve this work include:

- Embed the training into higher education settings, professional orientation, and less represented sectors (e.g. faith community, law enforcement, business community, etc.)
- Continue to identify "what to do" in communities and sectors
- Support ongoing alignment and local, community led strategies to change philosophy, policies and funding, programs and professional practice
- Evaluate impact of public awareness activities on outcomes for children, youth and young adults

# Implementing an Evidence-based Social and Emotional Learning Program, RULER, in Afterschool Settings

Kathryn A. Conrad, PhD, Heather S. Wallace, PhD, CFLE; & Matthew J. Devereaux, PhD  
Department of Family & Consumer Sciences  
University of Tennessee Extension



## Background & Purpose

Adverse childhood experiences are influential to brain development, learning, attention, memory, and emotion regulation, among others.<sup>1</sup> Research shows that an important type of learning, social and emotional learning, or SEL rewires the brain, boosts childhood resiliency, and supports lifelong learning and health.<sup>2</sup>

Developed by the Yale Center for Emotional Intelligence, RULER is an approach for integrating SEL in schools. Our project is the first time RULER has been tested in afterschool settings.

The purpose of our program and associated research is:

- to implement an evidence-based SEL approach, RULER, into five K-8th grade afterschool programs involving approximately 200 children.
- to evaluate RULER impact by tracking the change in students' SEL skills at three time points.

**R**ecognizing emotions in self and others

**U**nderstanding the causes and consequences of emotions

**L**abeling emotions accurately

**E**xpressing emotions appropriately

**R**egulating emotions effectively

## Program Highlights

RULER is an evidenced-based approach, with demonstrated impact:<sup>3</sup>

Improvements in...



- Attention and academic performance
- Social skills & emotion regulation
- Leadership skills
- School climate
- Teacher satisfaction

Decreases in...



- Student anxiety and depression
- Bullying behaviors
- Teacher burn-out

## Four RULER Anchor Tools

Charter – a collaborative mission statement that specifies the emotional climate of afterschool.

Mood Meter – a tool for identifying, labeling, and addressing feelings effectively

Meta-Moment – a 6-step strategy for taking a step back and envisioning the best version of yourself before acting on emotions.

Blueprint – a guide to handling conflict, understanding, and empathizing with different viewpoints.

## Implementation and Evaluation

### 2017

- Project coordinators organized a 2-day intensive training on the RULER approach.
- Yale trained 35 afterschool coordinators, staff, and counselors on the RULER program.
- IRB preparation.

### 2018

- IRB submission
- Coordination of RULER roll-out at five afterschool sites.
- Marketing RULER program.
- Preliminary (T1 – Time 1) data collection.
- Curricula development and ongoing training with afterschool site coordinators on RULER tools.

### 2019

- Ongoing (T2 and T3) data collection.
- Data analysis, evaluation, and manuscript preparation.
- Coordination for ongoing implementation and evaluation if funding persists.

## Goals & Expected Outcomes

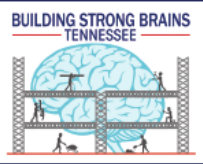
- Enhance students' SEL skills.
- Help teachers learn unique strategies for weaving in SEL to afterschool.
- Evaluate and document RULER effectiveness in afterschool in order to improve future implementation.
- Contribute to scholarship on SEL in afterschool settings.



# ACEs Community Summit

## Community Resilience, Educate, Act, Train, Inspire, Value, Empower

### United Way of Greater Chattanooga



May 1-2, 2017

United Way of Greater Chattanooga in partnership with Chattanooga 2.0's Early Matters Coalition hosted 5 workshops and a public community summit to raise the awareness of ACEs throughout the greater Chattanooga area. The workshops targeted specific professional groups, that either directly provide services to children and families or will be impacted by ACEs, including the Legal, Medical, Behavioral Health, Early Childhood Education and Youth Workers sectors of Chattanooga and members of Chattanooga2.0.



United Way of Greater Chattanooga partnered with the Regional Health Council and Blue Cross Blue Shield to host a medical workshop. Dr. Pat Levitt spoke to a large lunch group of medical professionals, including physicians, psychologists, health department staff, TennCare professionals, BCBS staff and members of the local medical society at a workshop sponsored by Blue Cross Blue Shield before leading a panel discussion.

United Way of Greater Chattanooga partnered with criminal, session and Hamilton County Juvenile Court to host a breakfast workshop featuring Dr. Levitt for the legal community. This event included lawyers, judges and law enforcement.



Members of the Behavioral Health community enjoyed Dr. Levitt's ACEs presentation at a workshop hosted by the City of Chattanooga's Family Justice Center, United Way. The workshop also included presenters from the Children's Advocacy Center, local pastors and the mental health and social service communities.



Following Dr. Levitt's talk, over 100 Early Childhood Educators and Youth Workers participated in the Brain Architecture game to explore the relationship between life experiences and brain developed.

*"I would love to take this opportunity to thank all those involved in bringing this vital training to our area. This particular training resonated with what we do at On Point. The information was invaluable and the presentation was coordinated well. Dr. Levitt was well informed and his presentation was given with excellence and understanding of his target audience. One of the highlights was the group involvement project that introduced the "Brain Architecture Game." This was an excellent hands-on learning tool that brought what Dr. Levitt had introduced to light. Once again, thank you for the chance to be a part of all this."*

— Tony Lombard, M.A., On Point Life-Group Facilitator

United Way partnered with the Chattanooga 2.0 Coalition and included all workgroups of this community movement aimed at improving education from cradle to career for a workshop featuring Dr. Levitt which was hosted by the Chattanooga Public Library.

Jim Coppinger, Hamilton County Mayor, and Andy Berke, City of Chattanooga Mayor, committed to on-going local efforts targeting ACEs, and declared this by joint proclamation. Pictured is Mayor Coppinger.



*"This is the beginning of something bigger... the first ever Summit for ACEs. We do know that ACEs are toxic in Tennessee and we rank 42nd in health. These people need an opportunity for answers. It's what our community does best, we step up through public and private partnerships."*

— Jim Coppinger, Mayor Hamilton County, TN



Ariel Ford with the City of Chattanooga's Office of Early Learning introduced First Lady Crissy Haslam and reaffirmed the city's commitment to ACEs education.



First Lady of Tennessee, Crissy Haslam, spoke at the public summit and presented the statewide initiative Building Strong Brains TN



Dr. Pat Levitt, Simms/Mann Chair in Neurogenetics at the Institute for the Developing Mind, Children's Hospital in Los Angeles and Senior Fellow at the Center for the Developing Child at Harvard University, spoke to an audience of over 350, on the impact of adverse childhood experience on the developing brain and the implications for the health of individuals and the community.

*"The understanding that a lifetime of outcomes begins at birth and before is critical for the allocation of future government and philanthropic assets. This is how we will bend the curve."*

— John Fairmont, Siskin Children's Institute, Community Summit Attendee

*"My nephew has these experiences- he really missed his mom and their interactions. She also has a daughter coming up and needs to know this. I'm going to tell her about ACEs."*

— Aunt and coach, Community Summit Attendee



Lesley Searce, President and CEO of United Way of Greater Chattanooga, followed Dr. Levitt's presentation and launched the Chattanooga Basics, the Early Matters Coalition's early childhood public awareness campaign as a strategy Chattanooga is using to promote healthy early childhood learning which can help prevent or counter the effects of ACEs. Chattanooga Basics help inform and educate parents on simple interactions they can have with their children during the early years of life to help prepare them for school and future success in life. Chattanooga 2.0, through the Early Matters Coalition continues to highlight ACEs awareness and trainings in the community.

At each event, participants were surveyed about the information presented. The table below shows a sample of the results for those who responded to the survey. Overall 56% reported having little or no knowledge about ACEs before attending one of Dr. Levitt's presentations. The majority of respondents (97%) indicated that they would use the presented information in their workplace or home.

ACEs Workshop and Summit Survey Responses	Legal	Behavioral	Early Childhood & Youth	Medical	Cha2.0	Public
"Prior to this event, I did NOT know about ACEs or had a LITTLE knowledge"	68%	27%	73%	43%	67%	55%
"I STRONGLY AGREE/AGREE that I will use this information at my workplace or in my home"	100%	100%	97%	92%	100%	93%

Over 100 agencies and businesses were represented at the workshops and summit. More than 200 requests were received at the conclusion of the 2-day events for additional training and resources.



United Way of Greater Chattanooga's 2-1-1 program staff was trained on ACEs and local partners who are follow-up referral sources for those impacted by ACEs.



Chattanooga 2.0 is a collective effort to address the needs of the vulnerable community in the South.

With Chattanooga 2.0, Early Matters is a coalition of over 100 organizations working to improve our community.

Early Matters supports the Chattanooga Basics, the fun, engaging, and powerful way every family can get ahead in life!



Following over 200 requests for additional trainings and resources from participants of the workshops and summit, the Early Matters Coalition sponsored Paper Tigers and Resilience screenings and panel discussions for the community as free events, with over 150 community participants including Hamilton County Department of Education, parents and community advocates.

#### United Way Day on the Hill February 2018

- Provided information on ACEs and local coalition work to 2 senators and 5 legislative representatives for Hamilton County
- ACEs appropriations was doubled for 2018-2019 in the TN state budget.

The Early Matters Coalition partnered with Hamilton County Department of Education's initial CampK summer program and provided ACEs and Chattanooga Basics trainings to over 120 families with children entering Kindergarten in the fall.



Chattanooga 2.0 Early Matters ACEs workgroup has formed a partnership with the City of Chattanooga's Police Department with strong endorsements from Chief David Roddy and department leadership which includes training neighborhood police and mental health court. To date over 200 members of the Police Department and Mental Health Court have participated in Building Strong Brains trainings. Pictured is Lieutenant D. Jones.

#### Upcoming events and programs:

Various community members across multiple sectors have requested additional training as a follow-up to the TCCY ACEs training, as a result the ACEs workgroup is in the early stages of developing a Resilience training that will also incorporate the Chattanooga Basics that will benefit diverse audiences and age groups. The training will offer strategies that can be incorporated in classrooms, organizations, businesses and homes to help build skills necessary for Resilience.

WTCL, the local PBS station, and the ACEs workgroup are in the planning stages for a community screening and panel discussion of the TN-state produced PBS ACEs documentary. Preliminary plans are for a Fall screening which will also include breakout sessions for education, medical and behavioral professionals followed by a call for increased community collaboration and partnerships to address and reduce the effects of ACEs in our community.



# Developing and Testing an ACEs Algorithm in Pediatric Primary Care

Alissa Valentine, Benjamin Hanna, Scherly Schrunder Gomez, Joseline Rivas, Mary Dietrich, Seth Scholer

Department of Pediatrics and the School of Nursing, Vanderbilt University Medical Center



## Background

- Health care providers need evidence-based tools to screen for Adverse Childhood Experiences (ACEs), including unhealthy parenting, in pediatric primary care.
- The most modifiable ACEs are parenting-related (Figure 1).
- Health care providers can address unhealthy parenting and can refer children who have been exposed to other stressors for counseling.

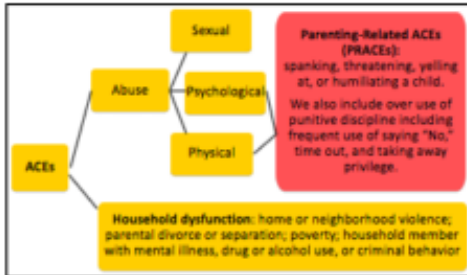


Figure 1. Some ACEs are parenting-related ACEs (PRACEs).

## Objective

- Change policy and practice by developing and testing an ACEs Algorithm for pediatric primary care (Figure 2)

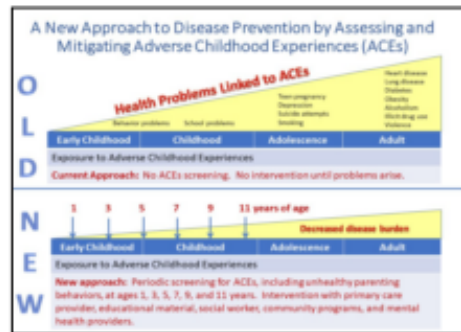


Figure 2. A new approach to screen for ACEs, including unhealthy parenting.

## Research

- The Parenting and Childhood Stressors (PCS) is an ACEs screening tool designed for pediatric primary care. The PCS is novel because it screens for unhealthy parenting (i.e. PRACEs).
  - Part 1: Parenting Score (questions 1-12)
  - Part 2: Other Childhood Stressors (questions 13-23)
  - Scoring: 1 point for each at-risk response.
  - Questions 1, 7, and 13 should be "Yes." All other responses should be "No."
- In 2017, with funding from the State of Tennessee, we screened over 750 parents of 2-10 year old children in the Vanderbilt Pediatric Primary Care Clinic, a population insured by TennCare.
- Elevated PCS scores were significantly associated with child behavior problems.
- The prevalence of at-risk responses (Figures 3-6) lay the foundation for an algorithm to integrate the PCS into pediatric primary care.



Figure 3. Part 1: Parenting Related ACEs (PRACEs)

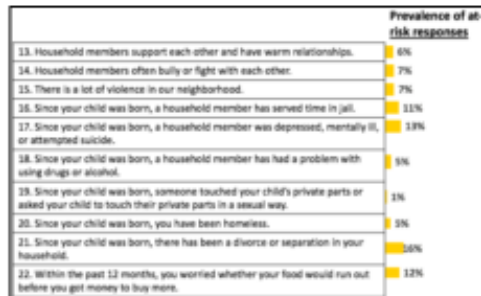


Figure 5. Part 2: Other Childhood Stressors



Figure 4. Histogram of the Parenting Score (i.e. PRACEs)

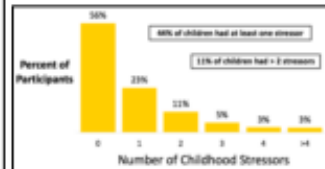


Figure 6. Histogram of Other Childhood Stressors

## ACEs Algorithm

- PCS data has led to the development of an ACEs Algorithm (Figure 7)
- The ACEs Algorithm includes scripted, tiered-level responses for:
  - Parenting Score (includes a one minute parenting intervention)
  - Other Childhood Stressors Score (includes recommendations for referral to social work or mental health)

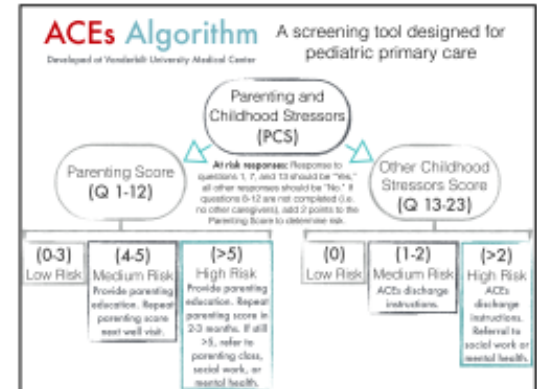


Figure 7. The ACEs Algorithm overview for pediatric primary care.

## Summary

- The PCS is an ACEs survey that can identify children exposed to unhealthy parenting and other childhood stressors.
- An ACEs algorithm with a parenting assessment has been developed that has promise for mitigating ACEs in pediatric primary care.

## Implications

- An ACEs Algorithm, integrated into the pediatric primary care visit, has implications for preventing child maltreatment and many physical and mental health problems.

## Next Steps

- Testing the implementation of the ACEs algorithm in two pediatric clinics in Nashville
- Working with the Tennessee Chapter of the American Academy of Pediatrics to edit and, if successful, distribute the algorithm to general pediatricians in Tennessee