

# ACES in PRIMARY CARE

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## Learning Objectives

- 1) Identify the ten Adverse Childhood Experiences (ACEs)
- 2) Describe the development of chronic disease in relation to ACEs
- 3) Describe the core tenets of trauma-informed primary care.

## The Adverse Child Experiences (ACE) Study

Over 17,000 adults (predominantly White, middle class)

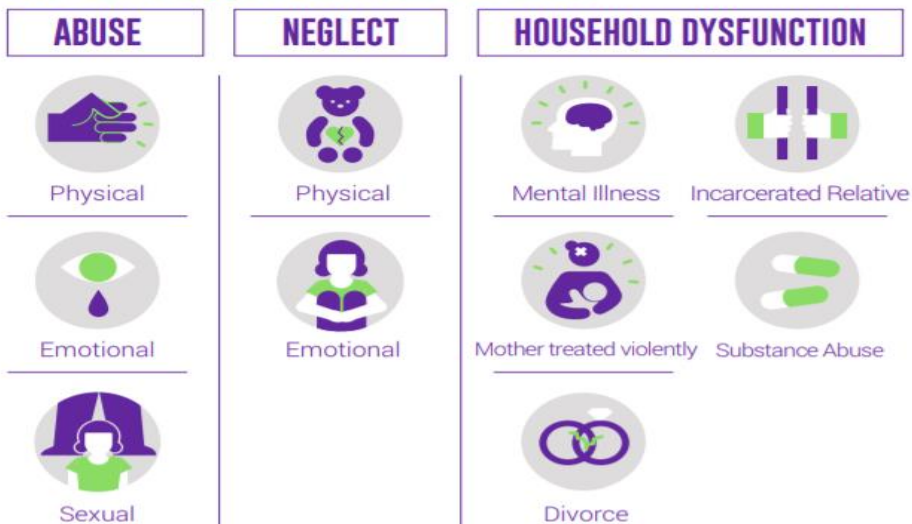
Followed longitudinally for 15+ years

Given a questionnaire about childhood life experiences

Analysis of health over time

ACE score correlated to risk of disease as an adult

### The three types of ACEs include



SOURCE: Robert Wood Johnson Foundation, 2013

## Toxic Stress Can Also Be Caused By...

- ▶ Community violence
- ▶ Bullying
- ▶ Discrimination
- ▶ Death of parent/guardian
- ▶ Separation from caregiver via foster care / immigration detention

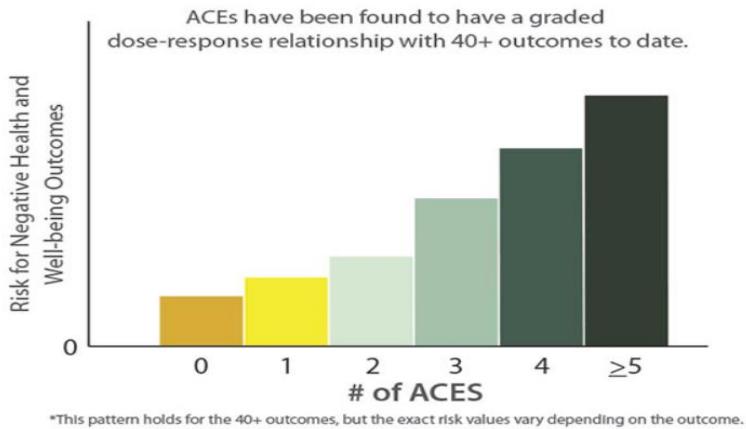
<https://centerforyouthwellness.org/health-impacts/>

## Childhood Adverse Experiences Found to be Very Common

Number of Adverse Childhood Experiences (ACE Score)	Women	Men	Total
0	34.5	38.0	36.1
1	24.5	27.9	26.0
2	15.5	16.4	15.9
3	10.3	8.6	9.5
4 or more	15.2	9.2	12.5

## Dose Response Measure

### Association between ACEs and Negative Outcomes



## Risk of Disease for ACEs of 4 or More

### TABLE 1. ACE STUDY FINDINGS

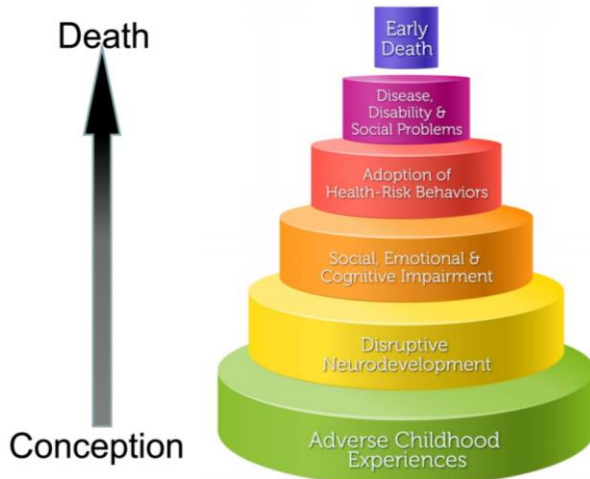
*In the ACE Study, in comparison to those reporting no ACEs, individuals with 4+ ACEs had significantly greater odds of reporting...*

Ischemic heart disease	2.2
Any Cancer	1.9
Chronic Bronchitis or emphysema (COPD)	3.9
Stroke	2.4
Diabetes	1.6
Ever attempted suicide	12.2
Severe obesity	1.6
Two or more weeks of depressed mood in the past year	4.6
Ever used illicit drugs	4.7
Ever injected drugs	10.3
Current smoker	2.2
Ever had a sexually transmitted disease	2.5

source: Felitti, 1998

<https://centerforyouthwellness.org/cyw-aceq/>

## Mechanisms by Which ACES Impact Adult Health



[https://www.aap.org/en-us/Documents/resilience\\_webinars\\_practical\\_approaches\\_violence\\_types.pdf](https://www.aap.org/en-us/Documents/resilience_webinars_practical_approaches_violence_types.pdf), powerpoint presentation, accessed 6-10-2018.

## Costs of Child Abuse and Trauma

- ▶ CDC 2012 Key findings:
- ▶ The estimated average lifetime cost per victim of nonfatal child maltreatment includes:
  - ▶ \$32,648 in childhood health care costs
  - ▶ \$10,530 in adult medical costs
  - ▶ \$144,360 in productivity losses
  - ▶ \$7,728 in child welfare costs
  - ▶ \$6,747 in criminal justice costs
  - ▶ \$7,999 in special education costs
- ▶ The estimated average lifetime cost per death includes:
  - ▶ \$14,100 in medical costs
  - ▶ \$1,258,800 in productivity losses

[https://www.cdc.gov/media/releases/2012/p0201\\_child\\_abuse.html](https://www.cdc.gov/media/releases/2012/p0201_child_abuse.html)  
- accessed June 10, 2018

# Core Tenets of Trauma Informed Primary Care

MANAGING ACES in the PRIMARY CARE SETTING



Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

**POLICY STATEMENT**

## Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health

**abstract**

Advances in a wide range of biological, behavioral, and social sciences are expanding our understanding of how early environmental influences (the ecology) and genetic predispositions (the biologic program) affect learning capacities, adaptive behaviors, lifelong physical and mental health, and adult productivity. A supporting technical report from the American Academy of Pediatrics (AAP) presents an integrated ecobiodevelopmental framework to assist in translating these dramatic advances in developmental science into improved health across the life span. Pediatricians are now armed with new information about the adverse effects of toxic stress on brain development, as well as a deeper understanding of the early life origins of many adult diseases. As trusted authorities in child health and development, pediatric providers must now complement the early identification of developmental concerns with a greater focus on those interventions and community investments that reduce external threats to healthy brain growth. To this end, AAP endorses a developing leadership role for the entire pediatric community—one that mobilizes the scientific expertise of both basic and clinical researchers, the family-centered care of the pediatric medical home, and the public influence of AAP and its state chapters—to catalyze fundamental change in early childhood policy and services. AAP is committed to leveraging science to inform the development of innovative strategies to reduce the precipitants of toxic stress in young children and to mitigate their negative effects on the course of development and health across the life span. *Pediatrics* 2012;129:e204–e231

**INTRODUCTION**

It is easier to build strong children than to repair broken men.<sup>1</sup>  
 Frederick Douglass (1817–1895)  
 From the time of its inception as a recognized specialty of medicine, the field of pediatrics has attached great significance to both the process of child development and the social/environmental context in which it unfolds. When the American Academy of Pediatrics (AAP) was founded in 1930, the acute health care needs of children were largely infectious in nature.<sup>2</sup> Over the ensuing 80 years, as increasingly effective vaccines, hygiene, and other public health initiatives produced dramatic gains, astute observers began to note that many noninfectious disease entities, such as developmental, behavioral, educational, and

COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, COMMITTEE ON EARLY CHILDHOOD, ADOPTIVE AND DEPENDENT CARE, AND SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS

**KEY WORDS**  
 adversity, brain development, ecobiodevelopmental framework, family pediatrician, health promotion, human capital investments, new medicine, toxic stress, resilience

**ABBREVIATIONS**  
 AAP—American Academy of Pediatrics  
 EBD—ecobiodevelopmental

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## Call for Action - Treating Toxic Stress

- 1) Screen
- 2) Educate
- 3) Collaborate with community to prevent Toxic Stress
- 4) Provide Treatments for Toxic Stress

## Screening for Toxic Stress and ACES

## Screening for Toxic Stress / Trauma

AAP 2012 recommends screening for risk factors in your population:

Maternal  
depression

Parental  
substance  
abuse

Community or  
home violence

Food Scarcity

Poor Social  
connectedness

## Examples of Screeners

- ▶ ACE Screening Tool
- ▶ Parental ACE Screening Tool
- ▶ Resiliency Questionnaire
- ▶ Seek Parent Screening Questionnaire
- ▶ Survey of Well Being of Young Children

\*Please email for full zip file of screens

## Example: CYW Adverse Childhood Experiences

### **Section 1.** *At any point since your child was born...*

- Your child's parents or guardians were separated or divorced
- Your child lived with a household member who served time in jail or prison
- Your child lived with a household member who was depressed, mentally ill or attempted suicide
- Your child saw or heard household members hurt or threaten to hurt each other
- A household member swore at, insulted, humiliated, or put down your child in a way that scared your child OR a household member acted in a way that made your child afraid that s/he might be physically hurt
- Someone touched your child's private parts or asked your child to touch their private parts in a sexual way
- More than once, your child went without food, clothing, a place to live, or had no one to protect her/him
- Someone pushed, grabbed, slapped or threw something at your child OR your child was hit so hard that your child was injured or had marks
- Your child lived with someone who had a problem with drinking or using drugs
- Your child often felt unsupported, unloved and/or unprotected



## Example: CYW Adverse Childhood Experiences (2/2)

### **Section 2.** *At any point since your child was born...*

- Your child was in foster care
- Your child experienced harassment or bullying at school
- Your child lived with a parent or guardian who died
- Your child was separated from her/his primary caregiver through deportation or immigration
- Your child had a serious medical procedure or life threatening illness
- Your child often saw or heard violence in the neighborhood or in her/his school neighborhood
- Your child was often treated badly because of race, sexual orientation, place of birth, disability or religion

Education and Resources to Support  
Parents and Prevent ACES

## AAP Education Tools - Poster Campaign



## AAP Parent Education Handouts

Brochures on Parenting Strategies

Brochures on Child Stress and Health Effects

Brochures on Building Child Attachment

Available in Spanish/English

American Academy of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN™

### Bring Out the Best in Your Children

Helping shape your children's behavior is a key part of being a parent. It can be difficult as well as rewarding. While at times it can be challenging, a few key principles can help.

## Community Engagement Initiatives to Increase Resiliency



AAP recommends pediatric practices strengthen connections to community resources for their patients

## Early Therapeutic Intervention for At-Risk Families

## Secondary Prevention Programs - Example SPR

### Skills for Psychology Recovery

6 Brief modules designed to help survivors of disaster/trauma cope better in months after trauma



## Skills for Psychological Recovery - Modules

Goal Setting  
/  
prioritizing

Problem  
Solving

Promoting  
positive  
activities

Managing  
emotional  
reactions

Promoting  
Helpful  
Thinking

Rebuilding  
social  
connections

<https://www.nctsn.org/resources/skills-psychological-recovery-spr-online>, Accessed 6-25-2018

## Secondary Prevention Programs - Triple P Level III

- ▶ Triple P (Positive Parenting Program) -
- ▶ Suite of interventions of varying intensity for parents of children 0-18
- ▶ Designed for public health use in Australia, now available commercially in US

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<http://www.triplep.net>

## Secondary Prevention Programs - Triple P Level III

- ▶ Triple III - Primary Care
- ▶ 4 15-30 min consultations (phone or in person)
- ▶ Optional 2 1 hour group seminars
- ▶ Content targets specific behavioral problems - e.g., sibling aggression, shopping misbehavior
- ▶ Builds parent skills in:
  - ▶ ABC analysis of behavior
  - ▶ Building a change plan with prevention, rewards / punishments
  - ▶ Tracking data over time

## Evidence-based Interventions to Intervene Early with ACES

- ▶ Trauma therapy
  - ▶ Trauma Focused CBT
  - ▶ Child and Family Traumatic Stress Intervention
  - ▶ Trauma and Grief Component Therapy
- ▶ Behavior modification / Parenting support therapies
  - ▶ Parent Child Interaction Therapy
  - ▶ Triple P - Positive Parenting Program - Level 4 and 5
  - ▶ Brief Behavioral Intervention

<https://www.nctsn.org/treatments-and-practices>, accessed 6-12-2018

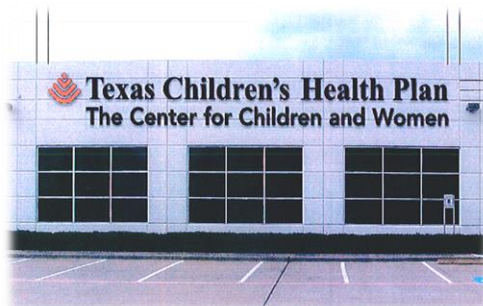
## Implementation Example - The TCHP Centers for Children and Women

### TCHP The Center for Children and Women



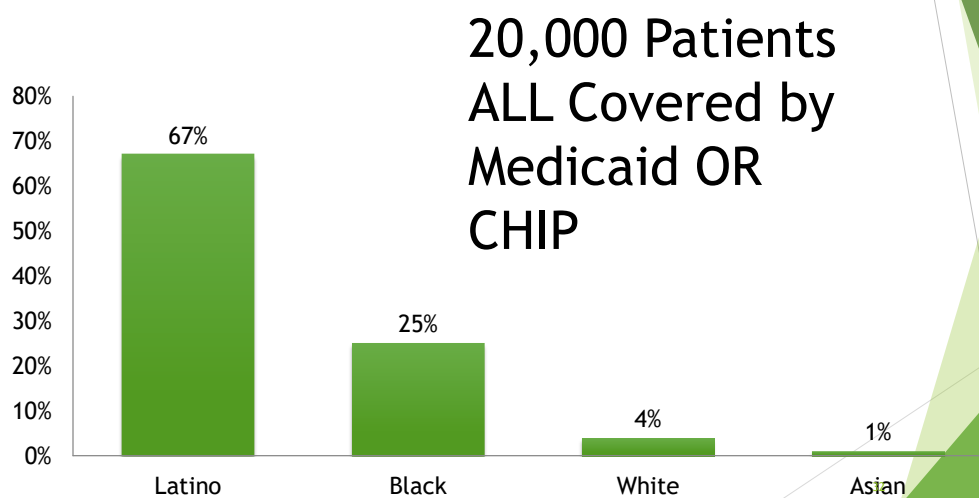


## Location of the Facility



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## Center Patient Demographics





## Funding - Medical Home Capitated Payment Model

- ▶ Flat fee per patient member
- ▶ 100% Risk model

### Value:

- ▶ No fee for service = ability to innovate
- ▶ Value on prevention and maintenance

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## Integrated Interdisciplinary Teams

OB/GYN	Pediatrics	Behavioral Health	Optometry
Speech	Nutrition	Pharmacy	Health Education
Dentistry	Lab	Radiology	Care Coordination

## Center Examples - Center Psychosocial Screening Tools

ASQ -  
development

MCHAT -  
Autism

PSC-17 School  
age disruptive  
behaviors

PHQ-9  
Depression

HITS -  
Interpersonal  
Violence

Food  
insecurity

EPDS -  
Edinburgh  
Depression

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## The TCHP Center Community Engagement Initiatives

Free Boys &  
Girls Club  
Memberships

Dynamo  
Soccer  
Clinics

Reach out  
and Read  
Programs

Keep Fit Club

Waterpark  
passes

100\$ rebate  
on sports/rec  
fees

## Community Health Connections - Center Classes

Keep Fit Exercise Classes  
Cooking Classes  
Breastfeeding Classes  
Becoming a mom classes  
Triple P classes  
School Outreach and Inservices



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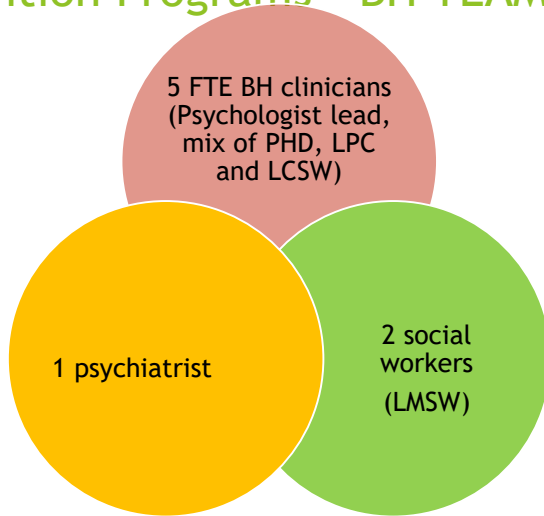
## Center Example - Patient Education Resources

Bilingual Patient education videos in the lobby

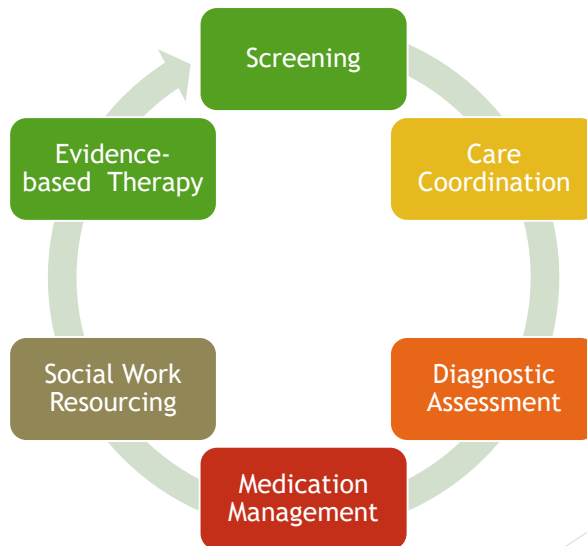
- Managing Child Stress
- Healthy Eating
- Positive activities



## Center Secondary Prevention and Early Intervention Programs - BH TEAM



## BH Care Interventions at the Center



## Center Evidence-Based Psychotherapy Interventions

RUBI protocol - Disruptive Behaviors in Children with Developmental Delay  
Brief Behavioral Intervention  
CBT - Depression and Anxiety  
Trauma Focused CBT  
Skills For Psychological Recovery



## Evidence-Based Treatments

- ▶ Focus on Modular Delivery
- ▶ Standardized Protocol across providers
- ▶ Providers all use the same patient education tools in the EMR



## Thoughts / Questions

Thank you!

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