“It is easier to build strong children than to repair broken men.”
Frederick Douglass (1817–1895)

NATIONAL AND STATE DATA ON ACE RISK AND RESILIENCE: THE CALL FOR MIND/BODY INTERVENTIONS

NATIONAL SUMMIT ON ADVERSE CHILDHOOD EXPERIENCES
MAY 13-14, 2013
PHILADELPHIA, PENNSYLVANIA

CHRISTINA BETHELL, PHD, MPH, MBA
PROFESSOR, OHSU SCHOOL OF MEDICINE
DIRECTOR, THE CHILD & ADOLESCENT HEALTH MEASUREMENT INITIATIVE

CAHMI
The Child & Adolescent Health Measurement Initiative
Healing is Upon Us!
Where Science, Policy and Experience Meet

The Science of Linked Lives and Life Course Health:
Safety, Connection, Attachment, Stress and Health
Healing is Upon Us!
(and within and between us!)
Where Science, Policy and Experience Meet

The Effects of Childhood Stress on Health Across the Lifespan
U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

PEDIATRICS
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health
Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, and Section on Developmental and Behavioral Pediatrics. Andrew S. Garner, Jack P. Shonkoff, Benjamin S. Siegel, Mary I. Dobbins, Marian F. Earls, Andrew S. Garner, Laura McGuinn, John Pascoe and David L. Wood

Pediatrics 2012;129;e2224; originally published online December 26, 2011; DOI: 10.1542/peds.2011-2662

5/13/13
Christina Bethell, PhD, MPH. ACES Summit
Healing is Economic! Where Science, Policy and Experience Meet

The Economists Are Listening

Many of our social problems, such as crime, are traced to an absence of the social and emotional skills, such as perseverance and self-control, that can be fostered by early learning. Crime costs taxpayers an estimated $1 trillion per year.

--James Heckman, Nobel Prize Winning Economist

IMAGE SOURCE: Heckman & LaFontaine (2007)
And Now We Have National and State Data on Adverse Childhood Experiences and Resilience FOR CHILDREN
(2011-12 NSCH (HRSA/MCHB/CDC)

47.9% of US Children 1+ (of 9) ACEs Age 0-17 years

- 22.6% No adverse family experiences
- 25.3% One adverse family experience
- 52.1% Two or more adverse family experiences

State Variation In Prevalence of 2+ (of 9) ACES
16.3% (UT) – 32.9% (OK) across states.

5/13/13
Christina Bethell, PhD, MPH. ACES Summit
Query for children in your state at www.childhealthdata.org

Welcome to the Data Resource Center for Child & Adolescent Health!
Welcome to the newly redesigned DRC website. Take a tour of the site and give us your feedback.

The mission of the Data Resource Center (DRC) is to take the voices of parents, gathered through the National Survey of Children's Health (NSCH) and the National Survey of Children with Special Health Care Needs (NS-CSHCN), and share the results through this online resource so they can be used by researchers, policymakers, family advocates and consumers to promote a higher quality health care for children and that healthy children grow up to be healthy adults.

5/13/13
Christina Bethell, PhD, MPH, ACES Summit
### IMPORTANT NOTE:

*Questions about child abuse and neglect were not directly asked about in the survey—though are unlikely to lead to substantially different overall rates since ACES are so commonly co-occurring.*

<table>
<thead>
<tr>
<th>Adverse Child Experiences Included</th>
<th>National Prevalence</th>
<th>State Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child had one or more Adverse Child or Family Experiences</td>
<td>47.9%</td>
<td>40.6% (CT) - 57.5% (AZ)</td>
</tr>
<tr>
<td>Child had two or more Adverse Child or Family Experiences</td>
<td>22.6%</td>
<td>16.3% (NJ) - 32.9% (OK)</td>
</tr>
<tr>
<td>Socioeconomic hardship</td>
<td>25.7%</td>
<td>20.1% MD – 34.3% (AZ)</td>
</tr>
<tr>
<td>Divorce/separation of parent</td>
<td>20.1%</td>
<td>15.2% (DC) – 29.5 (OK)</td>
</tr>
<tr>
<td>Death of parent</td>
<td>3.1%</td>
<td>1.4% (CT) – 7.1% (DC)</td>
</tr>
<tr>
<td>Parent served time in jail</td>
<td>6.9%</td>
<td>3.2% (NJ) – 13.2% (KY)</td>
</tr>
<tr>
<td>Witness to domestic violence</td>
<td>7.3%</td>
<td>5.0% (CT) – 11.1% (OK)</td>
</tr>
<tr>
<td>Victim or witness of neighborhood violence</td>
<td>8.6%</td>
<td>5.2% (NJ) – 16.6% (DC)</td>
</tr>
<tr>
<td>Lived with someone who was mentally ill or suicidal</td>
<td>8.6%</td>
<td>5.4% (CA) – 14.1% (MT)</td>
</tr>
<tr>
<td>Lived with someone with alcohol/drug problem</td>
<td>10.7%</td>
<td>6.4% (NY) – 18.5% (MT)</td>
</tr>
<tr>
<td>Treated or judged unfairly due to race/ethnicity</td>
<td>4.1%</td>
<td>1.8% (VT) – 6.5% (AZ)</td>
</tr>
</tbody>
</table>
Prevalence of Adverse Child and Family Experiences, by Age Groups, Household Income Level and Child Race/Ethnicity

- **0-5 years**
  - Two or more adverse family experiences: 12.5%
  - One adverse family experience: 24.1%

- **6-11 years**
  - Two or more adverse family experiences: 24.4%
  - One adverse family experience: 25.8%

- **12-17 years**
  - Two or more adverse family experiences: 30.5%
  - One adverse family experience: 26.0%

- **0-99% FPL**
  - Two or more adverse family experiences: 34.8%
  - One adverse family experience: 31.8%

- **100-199% FPL**
  - Two or more adverse family experiences: 28.6%
  - One adverse family experience: 30.4%

- **200-399% FPL**
  - Two or more adverse family experiences: 21.0%
  - One adverse family experience: 24.1%

- **400% FPL or more**
  - Two or more adverse family experiences: 9.6%
  - One adverse family experience: 17.4%

- **Hispanic**
  - Two or more adverse family experiences: 21.8%
  - One adverse family experience: 29.1%

- **White, non-Hispanic**
  - Two or more adverse family experiences: 21.0%
  - One adverse family experience: 23.3%

- **Black, non-Hispanic**
  - Two or more adverse family experiences: 31.1%
  - One adverse family experience: 29.3%

- **Other, non-Hispanic**
  - Two or more adverse family experiences: 22.2%
  - One adverse family experience: 22.2%
Compounded Risks
ACES and the Health and Stress of Parents

![Bar chart showing the percentage of children's mothers with excellent or very good overall health based on the number of ACEs (Adverse Childhood Experiences).]

- All Children: 56.7%
- At least 1 ACE: 42.9%
- 2+ ACEs: 35.8%
Compounded Risks
ACES and Home, School, Community

- Children with ≥ 2 Adverse Child/Family Experiences: 48.6%
- Children with ≥ 1 Adverse Child/Family Experience(s): 53.9%
- All US Children: 63.3%

Factors Promoting School Success
- Neighborhood Safety and Support: 44.6%
- Protective Home Environment: 15.6%
- Source: 2011/12 NSCH

Christina Bethell, PhD, MPH. ACES Summit
5/13/13
Chicken and Egg Observations
Adverse Childhood Experiences and Health
Children With Chronic Conditions Are More to Experience ACES. Children With ACES Are More Likely to Have Chronic Conditions

**CSHCN:** Children With Special Health Care Needs
**EBD:** Emotional, Behavioral, Developmental Problems
Prevalence of Individual Adverse Experiences, by CSHCN Status and EMB Problems

- Child was a victim of violence or witnessed violence in his/her neighborhood
- Child saw parents hit, kick, slap, punch or beat each other up
- Child lived with anyone who was mentally ill or suicidal, or severity depressed for more than a couple weeks

43.5% of children with EMB have parents who report usually or always feeling aggravated with their child.
Evidence is Building to Support the Use of Mind-Body Methods for Toxic Stress and Trauma

1. Fewer than 5% of US children using MB Methods
2. More likely among older youth (AOR: 2.99 for 12-17)
3. Less likely among lower income households (AOR: .46 100-199% FPL; .54 <100% FPL)
4. Parent use highly predictive: (AOR 7.4)

Mind-Body Modalities
- Deep breathing exercises
- Yoga
- Meditation
- Support group meetings
- Progressive relaxation
- Guided imagery
- Stress management class
- Biofeedback
- Tai Chi
- Hypnosis
- Qi Gong

“Without mindfulness, there is no therapy…Without mindfulness, there is no growth.”
Bessel van der Kolk
Professor of Psychiatry, Boston University. Author: Treating Traumatic Stress in Children and Adolescents (April, 2013)
NOTE: Percent shown in the parentheses are prevalence of conditions; 2007 NHIS
ADHD and Trauma: A Balanced Treatment Plan?

Children with ADHD more likely to have ACES (adjusted odds 1.6 or greater).

Among children with ADD/ADHD, 2-17 years (6.8%)

- Mind-body therapies (4.7%)
- Any Rx meds for 3+ months (12.3%)
- Rx for emotions, concentration, behavioral problems, 4-17 years (7.0%)
- Rx for concentration/hyperactivity/impulsivity, 4-17 years, (5.9%)
Too Little, Too Late?
Are Parents/We Waiting Until Needs Escalate Before Integrating Mind-Body Healing Methods

$3,210
$3,969
$3,441
$1,362
$2,180
$1,665
$0
$1,000
$2,000
$3,000
$4,000

All children
Children with any chronic condition (53.1%)
Children with EMB (16.5%)

- Children who used MBT (4.7%)
- Children who DID NOT use MBT (95.3%)

*2-part model adjusting age, gender, race/ethnicity, family income and US region child lives

$5813 for CSHCN with EMB (9%; 40% of CSHCN)
Adverse childhood experiences (ACEs) can have profound effects on the lifelong health of adults. Many studies on ACEs have been retrospective in nature, asking adults to recall their childhood experiences and then examining the prevalence of various chronic conditions and economic outcomes. The recent 2011/12 National Survey of Children’s Health (NSCH) provides cross-sectional, parent-reported data on nine ACEs among US children age 0 to 17 years (Table 1). Nearly half (47.9%) of US children age 0-17 years experienced one or more of the nine ACEs asked about in this survey (Figure 1). This translates into an estimated 34,825,978 children nationwide.

Table 1. National Prevalence of Adverse Child or Family Experiences based on the 2011/12 NSCH

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Figure 2. Prevalence of Adverse Child and Family Experiences, by Age and Household Income Subgroups

- Two or more adverse family experiences
- One adverse family experience

*FPL = Federal Poverty Level
Source: 2011/12 NSCH
Query for children in your state at www.childhealthdata.org

Publicly insured children are more likely to have insurance coverage which adequately meets their health needs than privately insured.

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Healing is Upon Us!
(and within and between us!)
Contact Information

- E-mail: bethellc@ohsu.edu
- Connect with the DRC to Join the Conversation!
  - Like us on Facebook: Facebook.com/childhealthdata
  - Follow us on Twitter: @childhealthdata
Additional Resource Slides

“You can’t go to good places with your mind if you can’t go good places with your body.” Stephen Porges, PhD
Professor Emeritus, University of Illinois at Chicago. Director, Brain Body Center in the Department of Psychiatry. Author: The Polyvagal Theory

“It is always a good thing to help a person rejoin the human race.” Ronald Siegel, MD, Harvard Medical School
Within State Disparities
Kentucky, the state with the third highest rate of Adverse Child/Family Experiences (2+), had the greatest variation by insurance type.

Within State Disparities
New Jersey, the state with the lowest rate of Adverse Child/Family Experiences (2+), had the greatest variation by household income level.
Empowering Parents To Improve Psychosocial Screening and Referral During Well Visits (www.wellvisitplanner.org)

**Step 1**

**Your Child, Your Well-Visit**

*Parents, welcome to the Well-Visit Planner™ website (WVP)! The purpose of the WVP is to help you prepare, learn about and identify your priorities for your child’s next well-visit. The WVP is for parents of children who are from 4 months through 3 years of age. Complete it before every well-child care visit by going through these three steps.*

**Step 2**

**Answer a Questionnaire**

*about your child and family.*

The questionnaire is composed of (# of questions) and takes approximately 10 minutes to complete.

**Step 3**

**Pick Your Priorities**

*for what you want to talk or get information about at your child’s well-visit.*

*Based on Bright Futures Guidelines*

**Get Your Visit Guide**

*that you and your child’s health care provider will use to tailor the visit to your child & family needs.*

See next page for sample visit guide.

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5/13/13

Christina Bethell, PhD, MPH. ACES Summit
“Without mindfulness, there is no therapy. Mindfulness is a necessary state to be in to live your life. All growth occurs because you are in a state of mindfulness. Without mindfulness, there is no growth.”

Bessel van der Kolk
Professor of Psychiatry, Boston University. Author: Treating Traumatic Stress in Children and Adolescents
Coping with Stress and the Body
The Essential Role of Mindfulness

“You can go good places with your mind if you can’t go good places with your body.”
Stephen Porges, PhD

Professor Emeritus, University of Illinois at Chicago.
Director, Brain Body Center in the Department of Psychiatry. Author: *The Polyvagal Theory*
Healthy Attachment and Parental Well-Being

The Importance of ACEs Healing for Parents

The best predictor of a child’s security of attachment is not what happened to his parents as children, but rather how his parents made sense of those childhood experiences. Daniel Siegel, Mindsight

Population Attachment Profile:
59% secure, 25% avoidant, and 11% anxious
Making sense of yourself is a source of strength and resilience for your child!

Making sense means being able to put your story into words and convey it to another person. **Your story includes:**

- how your mind has shaped your memories of the past to explain who you are in the present.
- the way you feel about the past
- your understanding of why people behaved as they did
- the impact of those events on your development into adulthood
Conventional Care Use Among Children With Emotional, Behavioral and Developmental Problems (EMB) Missed opportunities for improving efficiency?

Among children with **EMB conditions/problems*** (2-17 years):

- **6 or more office visits** (15.3%)
  - Among who used MBT (4.7%): 51.9%
  - Among who DID NOT use MBT (95.3%): 28.3%

- **Specialist visits** (13.2%)
  - Among who used MBT (4.7%): 38.7%
  - Among who DID NOT use MBT (95.3%): 21.4%

- **Emergency room visits** (20.2%)
  - Among who used MBT (4.7%): 34.7%
  - Among who DID NOT use MBT (95.3%): 26.0%

- **Mental health visits** (6.8%)
  - Among who used MBT (4.7%): 53.2%
  - Among who DID NOT use MBT (95.3%): 26.5%

- **Hospitalization** (2.7%)
  - Among who used MBT (4.7%): 7.1%
  - Among who DID NOT use MBT (95.3%): 2.8%

**EMB conditions/problems**: anxiety/stress, depression, ADD/ADHD, phobia/fears, insomnia/trouble sleeping, incontinence including bedwetting

$5813 for CSHCN with EMB (9%; 40% of CSHCN vs. <$900 for non-CSHCN)

5/13/13

Christina Bethell, PhD, MPH. ACES Summit
Thinking about the types of medical, traditional and alternative treatments that you are happy with, does a medical person Usually/Always show respect for these treatments?

<table>
<thead>
<tr>
<th></th>
<th>Mind-Body Therapy Users</th>
<th>non-Users</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All children</strong></td>
<td>70.5%</td>
<td>90.4%</td>
</tr>
<tr>
<td><strong>Among CSHCN</strong></td>
<td>54.3%</td>
<td>90.8%</td>
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