



Fundamentals of ACE Screening and Response in Pediatrics

California ACEs Aware Initiative



June 24, 2020



ACEs Aware Mission



To change and save lives by helping providers understand the importance of screening for Adverse Childhood Experiences and training providers to respond with trauma-informed care to mitigate the health impacts of toxic stress.



Presenters

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California Surgeon General

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Agenda



1. Pediatric ACE Screening and Clinical Response Overview
2. ACEs in Primary Care Case Studies
3. Audience Questions / Answers

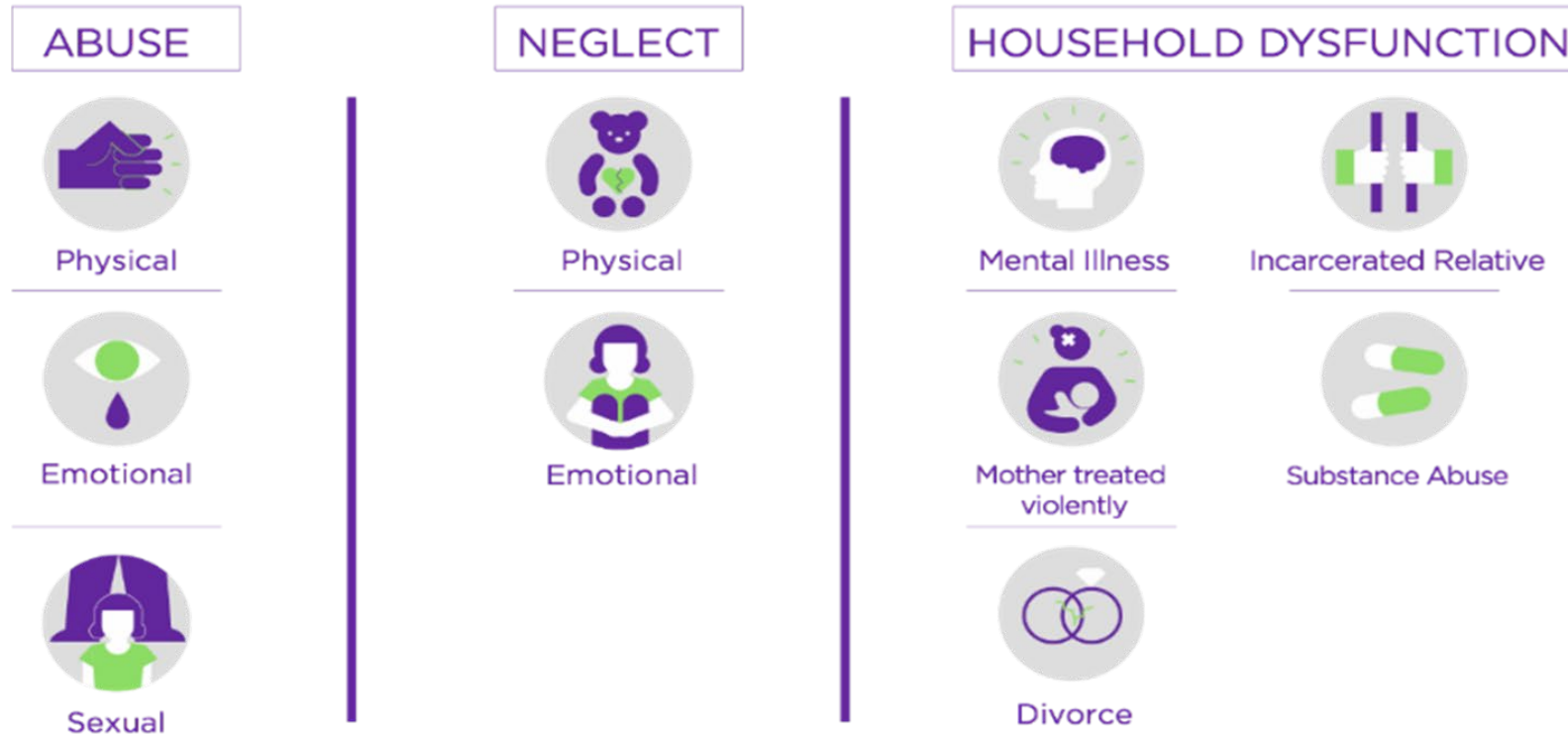




ACE Screening and Clinical Response Overview

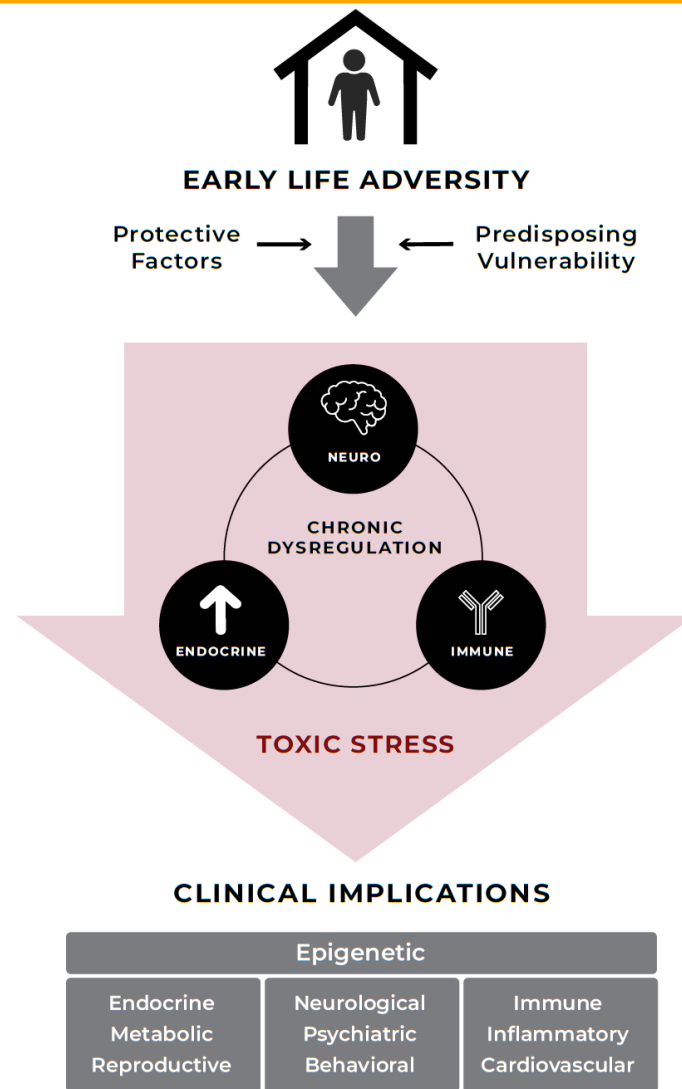
Nadine Burke Harris, MD, MPH, FAAP
California Surgeon General

10 Categories of Adverse Childhood Experiences



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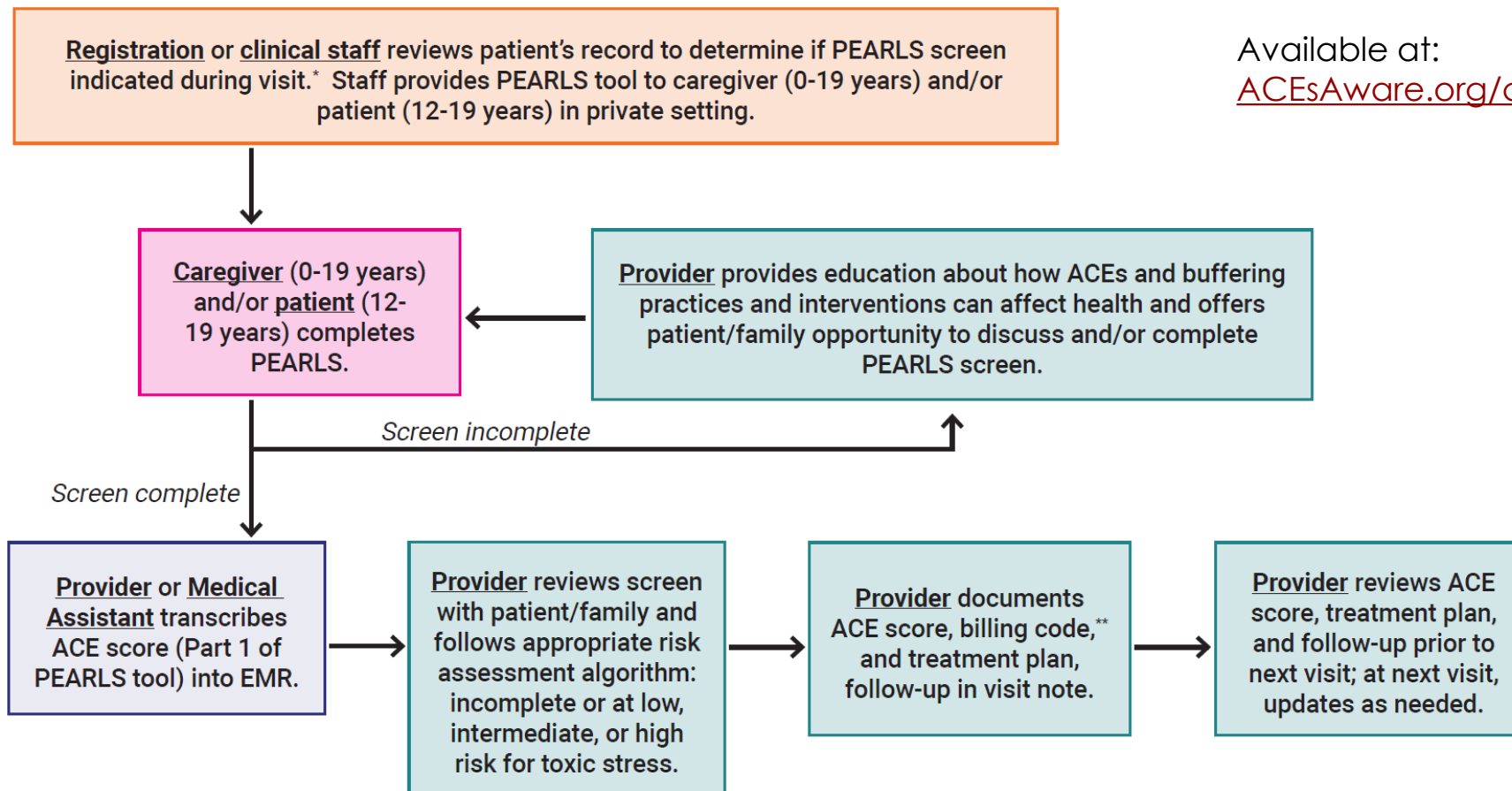




Adapted from Bucci et al, 2016



Pediatric ACE Screening Clinical Workflow



Available at:
ACEsAware.org/clinical-assessment



Pediatric ACEs and Related Life Events Screener (PEARLS) – De-Identified

Available at:

ACEsAware.org/screening-tools/

Pediatric ACEs and Related Life Events Screener (PEARLS)

CHILD - To be completed by: **Caregiver**

At any point in time since your child was born, has your child seen or been present when the following experiences happened? Please include past and present experiences.

Please note, some questions have more than one part separated by "OR." If any part of the question is answered "Yes," then the answer to the entire question is "Yes."

PART 1:

1. Has your child ever lived with a parent/caregiver who went to jail/prison?
2. Do you think your child ever felt unsupported, unloved and/or unprotected?
3. Has your child ever lived with a parent/caregiver who had mental health issues?
(for example, depression, schizophrenia, bipolar disorder, PTSD, or an anxiety disorder)
4. Has a parent/caregiver ever insulted, humiliated, or put down your child?
5. Has the child's biological parent or any caregiver ever had, or currently has a problem with too much alcohol, street drugs or prescription medications use?
6. Has your child ever lacked appropriate care by any caregiver?
(for example, not being protected from unsafe situations, or not cared for when sick or injured even when the resources were available)
7. Has your child ever seen or heard a parent/caregiver being screamed at, sworn at, insulted or humiliated by another adult?
OR has your child ever seen or heard a parent/caregiver being slapped, kicked, punched beaten up or hurt with a weapon?
8. Has any adult in the household often or very often pushed, grabbed, slapped or thrown something at your child?
OR has any adult in the household ever hit your child so hard that your child had marks or was injured?
OR has any adult in the household ever threatened your child or acted in a way that made your child afraid that they might be hurt?
9. Has your child ever experienced sexual abuse?
(for example, anyone touched your child or asked your child to touch that person in a way that was unwanted, or made your child feel uncomfortable, or anyone ever attempted or actually had oral, anal, or vaginal sex with your child)
10. Have there ever been significant changes in the relationship status of the child's caregiver(s)?
(for example, a parent/caregiver got a divorce or separated, or a romantic partner moved in or out)

Add up the "yes" answers for this first section:

Please continue to the other side for the rest of questionnaire →

This tool was created in partnership with UCSF School of Medicine.

Child (Parent/Caregiver Report) – Deidentified

PART 2:

1. Has your child ever seen, heard, or been a victim of violence in your neighborhood, community or school?
(for example, targeted bullying, assault or other violent actions, war or terrorism)
2. Has your child experienced discrimination?
(for example, being hassled or made to feel inferior or excluded because of their race, ethnicity, gender identity, sexual orientation, religion, learning differences, or disabilities)
3. Has your child ever had problems with housing?
(for example, being homeless, not having a stable place to live, moved more than two times in a six-month period, faced eviction or foreclosure, or had to live with multiple families or family members)
4. Have you ever worried that your child did not have enough food to eat or that the food for your child would run out before you could buy more?
5. Has your child ever been separated from their parent or caregiver due to foster care, or immigration?
6. Has your child ever lived with a parent/caregiver who had a serious physical illness or disability?
7. Has your child ever lived with a parent or caregiver who died?

Add up the "yes" answers for the second section:



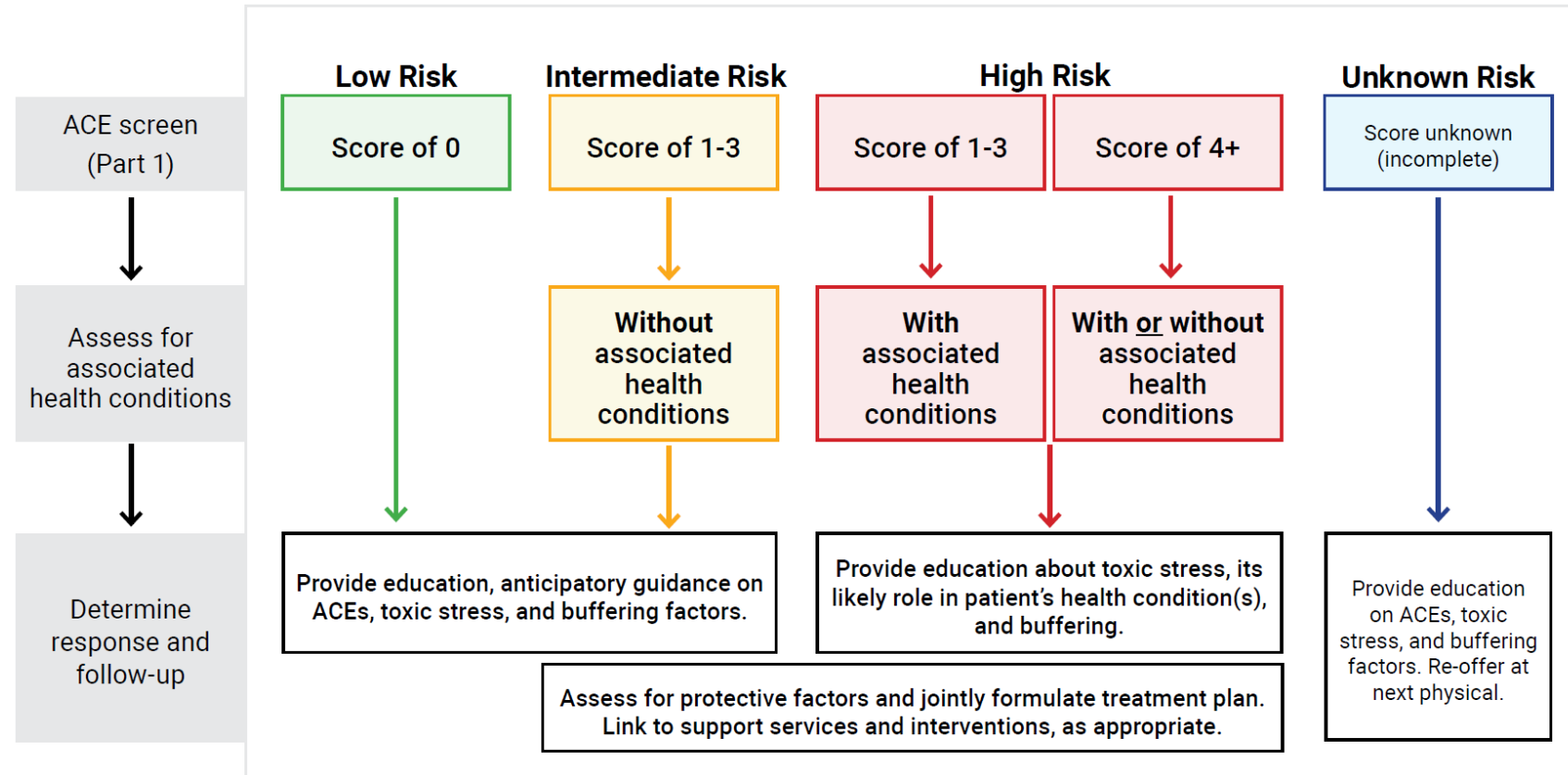
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Child (Parent/Caregiver Report) – Deidentified

ACEs and Toxic Stress Risk Assessment Algorithm – Pediatrics

Available at: ACEsAware.org/clinical-assessment



ACE-Associated Health Conditions – Pediatrics

For more details, see the ACEs and Toxic Stress Risk Assessment Algorithms at: ACEsAware.org/clinical-assessment

Symptom or Health Condition	For $\geq X$ ACEs (compared to 0)	Odds Ratio
Asthma ^{26, 33}	4	1.7 - 2.8
Allergies ³³	4	2.5
Dermatitis and eczema ³⁹	3*	2.0
Urticaria ³⁹	3*	2.2
Increased incidence of chronic disease, impaired management ²⁵	3	2.3
Any unexplained somatic symptoms ²⁵ (eg, nausea/vomiting, dizziness, constipation, headaches)	3	9.3
Headaches ³³	4	3.0
Enuresis; encopresis ⁵	–	–
Overweight and obesity ³	4	2.0
Failure to thrive; poor growth; psychosocial dwarfism ^{5, 2, 41}	–	–
Poor dental health ^{16, 22}	4	2.8
Increased infections ³⁹ (viral, URIs, LRTIs and pneumonia, AOM, UTIs, conjunctivitis, intestinal)	3*	1.4 - 2.4
Later menarche ⁴⁰ (≥ 14 years)	2*	2.3
Sleep disturbances ^{5, 31}	5**	PR 3.1
Developmental delay ³⁰	3	1.9
Learning and/or behavior problems ³	4	32.6
Repeating a grade ¹⁵	4	2.8
Not completing homework ¹⁵	4	4.0
High school absenteeism ³³	4	7.2
Graduating from high school ²⁹	4	0.4
Aggression; physical fighting ²⁸	For each additional ACE	1.9
Depression ²⁹	4	3.9
ADHD ⁴²	4	5.0
Any of: ADHD, depression, anxiety, conduct/behavior disorder ³⁰	3	4.5
Suicidal ideation ²⁸	For each additional ACE	1.9
Suicide attempts ²⁸	For each additional ACE	1.9 - 2.1
Self-harm ²⁸	For each additional ACE	1.8
First use of alcohol at < 14 years ⁷	4	6.2
First use of illicit drugs at < 14 years ¹⁰	5	9.1
Early sexual debut ²¹ ($< 15-17$ y)	4	3.7
Teenage pregnancy ²¹	4	4.2

ACEs in Primary Care Case Studies

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Case Study #1

5-year old male and 8-year old female siblings present with grandmother for annual well-child care visit.

Over a year since their last medical visit.

Case Study #1 – Clinical Presentation

5-year old male

**Abdominal pain
x 5 months**

- Occurs mostly at night before bedtime
- Relieved by grandmother lying down with him
- No pharmacological treatment attempted
- No behavioral concerns
- Otherwise well



Case Study #1 – Clinical Presentation

8-year old female

Behavioral concerns in school including difficulty concentrating and angry outbursts since start of school year

- Typically occur during periods of transition and not getting wants
- Otherwise physically well



Case Study #1 – History

Birth History	Both full term
Development	Both children had mild delays early in life that resolved with entry to school



Case Study #1 – ACE Score, Physical Exam & Assessment

	5-year old male	8-year old female
ACE Score	5	5
Physical Exam/ Diagnostics	Abdomen nontender on exam, no masses. Negative UA.	Unremarkable
Assessment	5 yo male with 5 months of abdominal pain at bedtime; likely related to toxic stress physiology	8 yo female with 6 months of emotional dysregulation in school; likely secondary to toxic stress physiology



Case Study #1 – Primary Care Provider Plan

1	Educate the grandmother on ACEs and toxic stress presentations
2	Assess, validate, and empower the patients' natural supports in the home
3	Conduct warm handoff to behaviorist for trauma-focused therapy
4	Follow up every 2-3 months



Case Study #1 – Behavioral Health Provider Initial Evaluation

Primary Goal upon Warm Hand-off/Referral	Initial Evaluation
<ul style="list-style-type: none">○ Caregiver engagement/relationship building○ Reinforcing the ACE framework to contextualize the assessment and treatment planning process	<ul style="list-style-type: none">○ Focus on identifying caregiver strengths and needs to enhance capacity to be a secure base and effective buffer○ Identify sources of ongoing adversity for the family that require immediate attention



Case Study #1 – Behavioral Health Provider Assessment & Plan

Initial Intake Sessions Revealed	Plan	
<ul style="list-style-type: none">○ High caregiver ACE score (4+)○ Caregiver was struggling with multiple chronic medical conditions○ Biological parent experiencing heightened instability that was impacting family daily	1	Support caregiver in establishing strategies for responding to ongoing stressors
	2	Enhance caregiver use/access to natural supports
	3	Prepare family for engagement in trauma-focused therapy



Case Study #1 – Key Takeaways

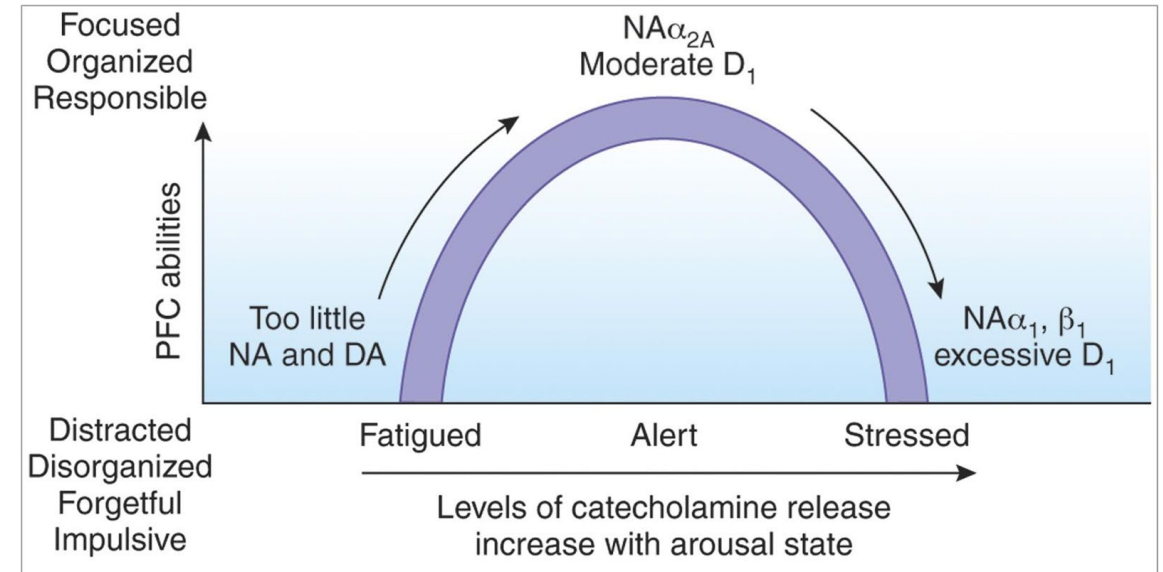
Toxic Stress Response	Treatment
<ul style="list-style-type: none">○ Neuro-endocrine-immune and genetic regulatory pathways○ We more commonly recognize the association between ACEs and behavioral or psychiatric symptoms○ Neuro-developmental, endocrine or inflammatory symptoms are less often connected to the toxic stress response but should be considered as such	<ul style="list-style-type: none">○ Reduce the sources of adversity and enhance sources of buffering○ Siblings may have different presentations, but they often respond to similar treatment plans if toxic stress is a root cause



Case Study #1 – Key Takeaways

ACEs and toxic stress affect brain function:

- Anxiety impairs working memory
- Stress hormones can cause cell death in certain brain regions
- Stress response
("fight or flight or freeze" behaviors mimic symptoms of certain psychiatric disorders (such as impulsivity, distractibility, oppositionality))



Arnsten (2009)



Case Study #1 – Key Takeaways

Guanfacine (brand name: Tenex, Intuniv) is a very effective medication for treating the stress response:

- A selective alpha 2A agonist, it acts on:
 - Post-synaptic receptors in the prefrontal cortex to modulate attention, impulsivity, and working memory; and
 - Pre-synaptic receptors in the brainstem to modulate sympathetic nervous system activity.





Case Study #2

13-year old athletic male with
3 months of difficulty breathing
when lying down at night.

No change in severity or frequency.

Case Study #2 – History

Past Medical History	Positive for allergies; Negative for asthma or other chronic lung abnormality
Family History	Negative



Case Study #2 – Initial & Follow Up Evaluations

	Initial Evaluation	Follow Up Evaluation
ACE Score	0 - From most recent WCC	3 – At follow-up visit
Depression & Anxiety Scales	PHQ: 0	PHQ: 4 GAD-7: 11
Physical Exam/ Diagnostics	Unremarkable neck and chest XR; O2 sat > 96% in supine position	Unchanged
Assessment	Difficulty breathing at night due to unknown trigger	Difficulty breathing likely due to significant stress and anxiety
Plan	Antihistamines for allergies, trial of albuterol, trial of PPI. All associated with no improvement in symptoms.	See next slide



Case Study #2 – Primary Care Provider Plan

1	Provide psychoeducation on ACEs and toxic stress
2	Help patient identify supportive adults
3	Support patient in informing parents of ACEs
4	Review and set goals with patient for 6 domains of wellness, focusing on sleep, healthy relationships, mental health, and mindfulness
5	Follow up in 1 month

ACEs Aware Self-Care Tool

- ☐ **Healthy relationships.** We've set a goal of...
- ☐ Using respectful communication even when we are upset or angry
 - ☐ Spending more high-quality time together as a family, such as:
 - ☐ Having regular family meals together
 - ☐ Having regular "no electronics" time for us to talk and/or play together
 - ☐ Talking, reading, and/or singing together every day
 - ☐ Making time to see friends to create a healthy support system for myself and our family
 - ☐ Connecting regularly with members of our community to build social connections
 - ☐ Asking for help if a relationship or environment feels physically or emotionally unsafe
 - ☐ The National Domestic Violence hotline is **800-799-SAFE (7233)**
 - ☐ The National Sexual Assault hotline is **800-656-HOPE (4673)**
 - ☐ To reach a crisis text line, **text HOME to 741-741**
 - ☐ Create your own goal: _____
- ☐ **Exercise.** We've set a goal of...
- ☐ Limiting screen time to less than one hour per day
 - ☐ Walking at least 20 minutes every day
 - ☐ Finding a type of exercise that we enjoy and doing it together as a family
 - ☐ Getting my child involved in a sport, dance class, or other form of regular exercise
 - ☐ Create your own goal: _____

ACEsAware.org/heal/resources/resources-by-topic/self-care-tools/



Case Study #2 – Key Takeaways

Many ACE-informed treatment plans can be managed within primary care, even when robust behavioral health services are available, because many patients:

- **Do not require direct intervention by a behavioral health provider**
(PCP intervention is the appropriate level of care); or
- **Are not ready to engage in behavioral health treatment**
(level of readiness/Stages of Change).
 - This also empathizes the importance of **continuity of care to support enhanced readiness for additional treatment**, when appropriate.



Case Study #2 – Key Takeaways

- Access to behavioral health partners for consultation can be helpful in these cases
- Can provide PCPs with:
 - **Information**
 - e.g., internal and external triggers that might impact sleep; relaxation, mindfulness, grounding practices.
 - **Resources**
 - e.g., sleep hygiene psycho-education materials, etc.
 - **Thought partnership**



Case Study #2 – Key Takeaways

- **False negatives happen**
- **Routine ACE screening** helps to **normalize inquiry** and helps patients **make the association between adversity and health**
- Reflects the importance of **continuity of care** as a vehicle to support enhanced readiness to share true ACE score
- Many **ACE-informed treatment plans can be managed within the primary care home** even if you have access to robust mental health services



Case Study #2 – Key Takeaways

- For adolescents, letting them know that it's normal for their bodies to make more stress hormones as a result of what they've experienced can be **de-stigmatizing** and **help them understand how to help themselves**
- **Emphasize what they are already doing well** (exercise) and areas where they can “**double down**”
- **Set a few simple goals** and **follow up**
- Adolescents can also benefit from **mindfulness interventions** (often through their smart phones)



ACEs Aware Provider Training



- **Get trained** at www.ACEsAware.org/training
- Free, 2-hour online course that offers CME and MOC credits
- Includes information on:
 - DHCS policies and requirements for providers
 - Science of trauma and toxic stress
 - How to screen for ACEs
 - How to implement trauma-informed care



ACEs Aware Provider Toolkit and Resources

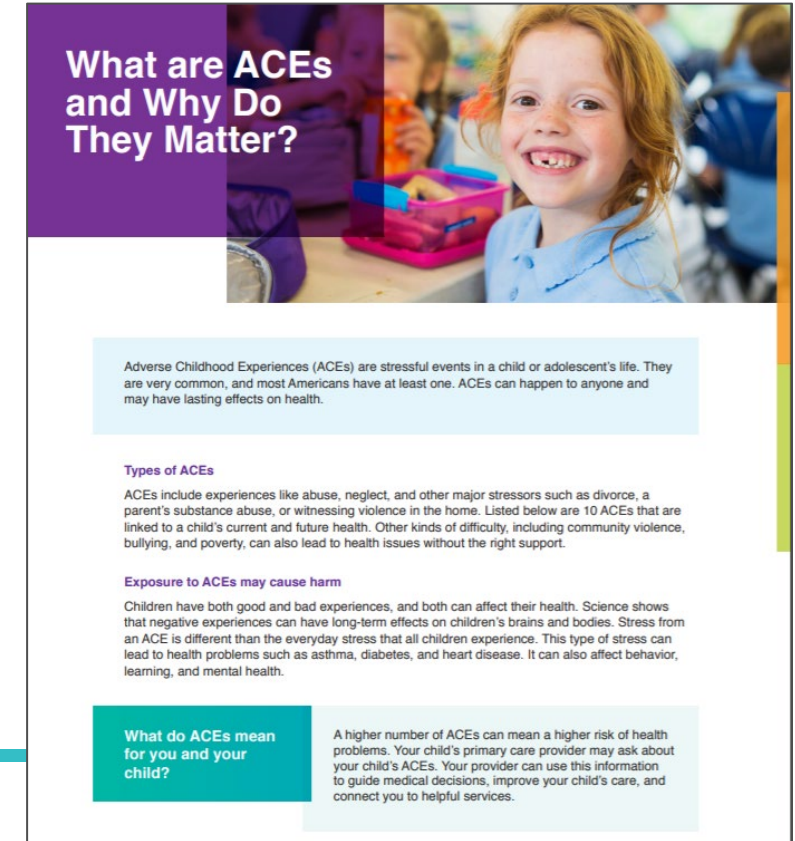


The [Provider Toolkit](#) provides comprehensive information on the ACEs Aware initiative

ACEsAware.org/provider-toolkit

[ACE Resources for Providers and Patients](#)

ACEsAware.org/resources





Audience Questions & Answers

Upcoming Webinar

The Last Wednesday of Each Month from 12-1 p.m. PDT



July 29th 12 – 1 p.m. PDT: Fundamentals of ACE Screening & Response in Adult Medicine

Register for Webinars and Find Webinar Recordings at:

www.ACEsAware.org/educational-events





Questions?

Contact Us



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