



GRANTEE

ACES Aware Initiative and Learning Session

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Disclosures



No commercial disclosures



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Introductions & Opening Questions

Zoom:

- Please mute when not speaking
- Chat function to chime into discussion or ask a question at any time
- Rename yourself to include pronouns next to your name (Participants, hover over mouse)

- Overview: Operating Agreements
 1. Confidentiality
 2. One diva, one mic
 3. Move up, move up [speaking, listening]
 4. Be curious
 5. Other suggestions?

Introductions & Opening Questions

Presenter intros: Naomi Schapiro, Victoria Keeton

[INSERT PollEverywhere Questions here]

Overview on ACES Aware and SBHC applications



What is ACEs Aware?



Screen

Treat

Heal

About

GET TRAINED



ACES Aware

ACES Aware is an initiative led by the Office of the California Surgeon General and the Department of Health Care Services to give Medi-Cal providers training, clinical protocols, and payment for screening children and adults for ACEs.

[Get Updates from ACEs Aware >](#)

<https://acesaware.org>



As of January 1, 2020 the California Department of Health Care Services will reimburse providers of all children/adults on **MediCal** \$29 per approved ACES & related stress screens:

- Children (0-21) – yearly per provider/practice
- Adults (21+) – once per provider/practice

By July 1, 2020, providers who bill for screening will have to attest that they have taken the required training

- attest using NPI #

<https://www.acesaware.org/screen/screening-tools/>



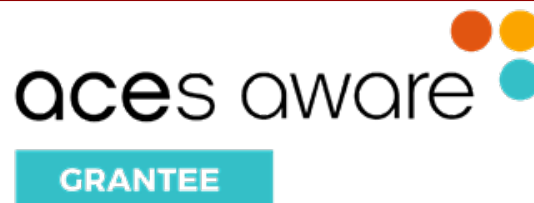
<https://www.dhcs.ca.gov/provgovpart/Pages/TraumaCare.aspx>

Adverse Childhood Experiences: “Turning gold into lead.”

- Felitti & Anda began large retrospective study at S. California Kaiser in 1995/supported by CDC
- 17,000 adults seeking preventive care queried about childhood adversity
- 22% of sample had been sexually abused as children – most had not discussed this with their adult provider

<https://www.cdc.gov/violenceprevention/childabuseandneglect/cestudy/index.html>

Felitti, 2002



Adverse Childhood Experiences

Traumatic events that can have negative, lasting effects on health and wellbeing



People with 6+ ACEs can die

20 yrs

earlier than those who have none





1/8 of the population have more than 4 ACEs




www.70-30.org.uk
@7030Campaign


4 or more ACEs

3x the levels of lung disease and adult smoking 

11x the level of intravenous drug abuse 

14x the number of suicide attempts 

4x as likely to have begun intercourse by age 15 

4.5x more likely to develop depression 

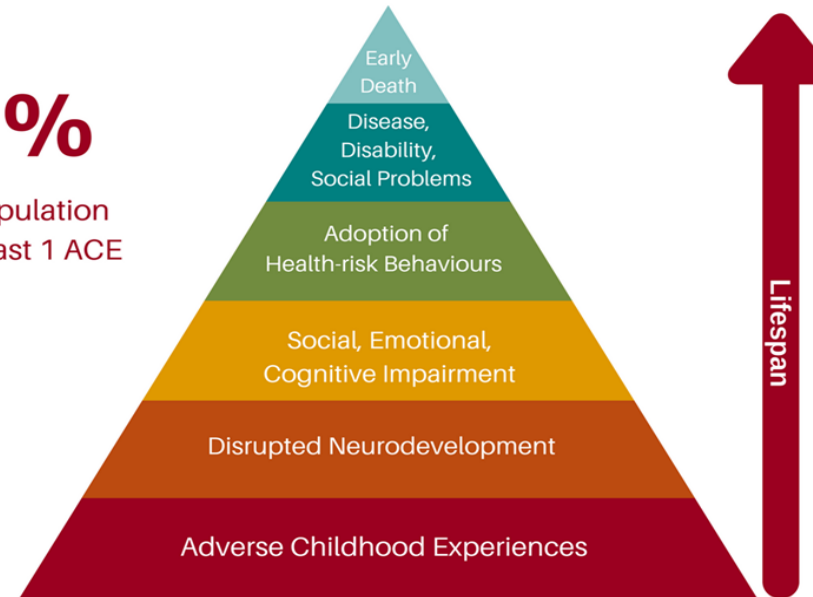
2x the level of liver disease 

“ Adverse childhood experiences are the single greatest unaddressed public health threat facing our nation today ”

Dr. Robert Block, the former President of the American Academy of Pediatrics

67%

of the population have at least 1 ACE



ACEs Dramatically Increase Risk for 9 out of 10 Leading Causes of Death in US

Leading Causes of Death in US, 2017 / **Odds Ratio Associated with ≥ 4 ACEs**

| 1 | 2 | 3 | 4 | 5 |
|-----------------------------|------------------------|--|--|--------------------------------------|
| Heart Disease 2.1 | Cancer 2.3 | Accidents 2.6 | Chronic Lower Respiratory Disease 3.1 | Stroke 2.0 |
| 6 | 7 | 8 | 9 | 10 |
| Alzheimer's 4.2 | Diabetes 1.4 | Influenza and Pneumonia - | Kidney Disease 1.7 | Suicide (Attempts) 37.5 |

Source of causes of death: CDC, 201716; Sources of odds ratios: Hughes et al., 201712 for 1, 2, 4, 7, 10; Petrucelli et al., 20199 for 3 (injuries with fracture), 5 Center for Youth Wellness, 201417 for 6 (Alzheimer's disease or dementia) Center for Youth Wellness, 201417 and Merrick et al., 201926 for 9

Annual Cost of ACEs to CA

Cardiovascular disease

Smoking

Heavy Drinking

Obesity



Asthma

Arthritis

COPD

Depression

Data source: Miller TR, Waehrer GM, Oh DL, Purewal Boparai S, Ohlsson Walker S, Silverio Marques S, et al. (2020) Adult health burden and costs in California during 2013 associated with prior adverse childhood experiences. PLoS ONE 15(1): e0228019. <https://doi.org/10.1371/journal.pone.0228019>

ACE SCORE & CV HEALTH

School-based study of 6th-8th grade children, measuring BP, HR, BMI, WC, parent questionnaire re ACEs

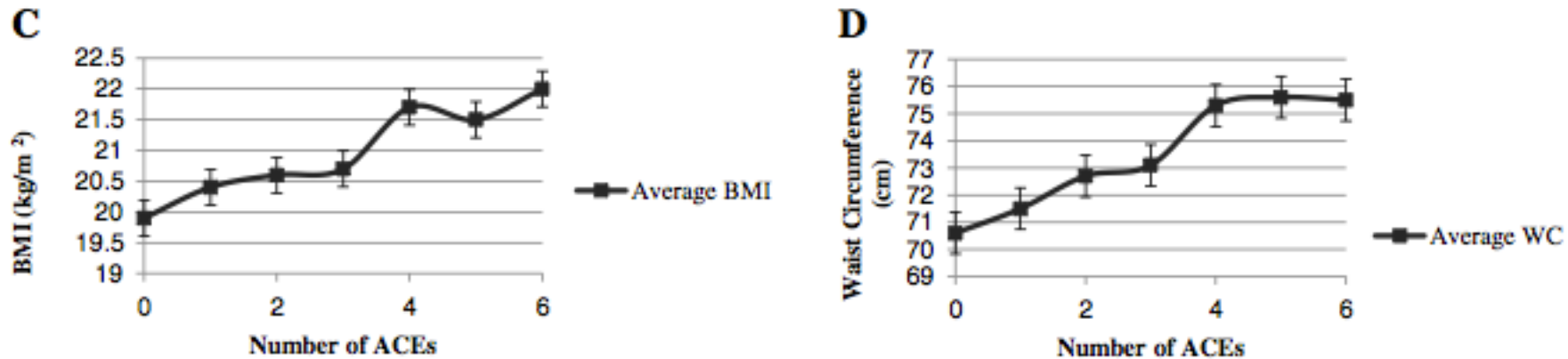


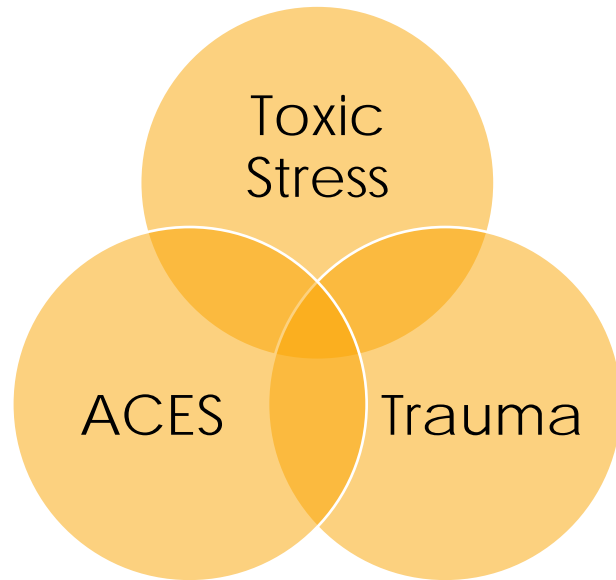
Figure 1 Average physiological measures by number of ACEs. **A** represents the average systolic BP for each ACEs category. **B** represents the average HR for each ACEs category. **C** represents the average BMI for each ACEs category. **D** represents the average WC for each ACEs category. Standard error bars shown. ACEs = Adverse childhood experiences; BP = blood pressure; HR = heart rate; BMI = body mass index; WC = waist circumference.

Combined with other childhood studies in an ongoing longitudinal CV study

ACE IMPACT ON URBAN YOUTH

- Retrospective chart review of 701 patients at Bayview Child Health Ctr, San Francisco (all seen 2007-2009)
- 9 ACE criteria + Community trauma score
- Correlated with BMI & learning/behavior problems

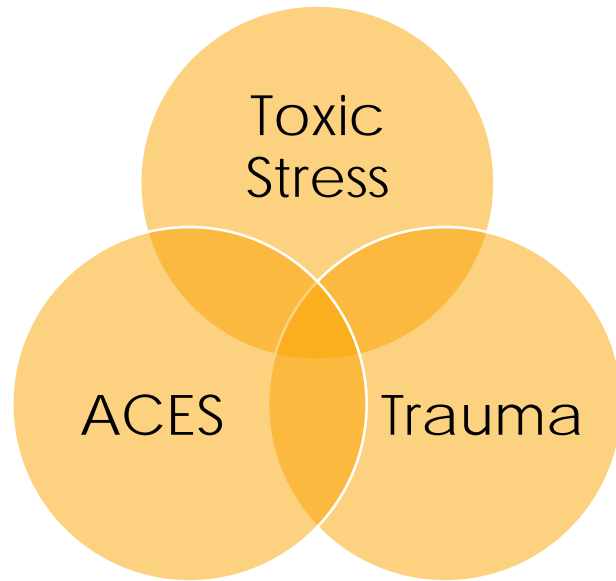
Burke, N. J., Hellman, J. L., Scott, B. G., Weems, C. F., & Carrion, V. G. (2011). The impact of adverse childhood experiences on an urban pediatric population. *Child Abuse Negl*, 35(6), 408-413.
doi:10.1016/j.chiabu.2011.02.006



“toxic stress, can result from strong, frequent, or prolonged activation of the body’s stress response systems in the absence of the buffering protection of a supportive, adult relationship.” P. e236

Cautions: Parent/caregiver may be present and loving, yet overwhelmed by own trauma/toxic stress OR level of unremitting stress may contribute to feelings of hopelessness and lack of control in caregiver

Shonkoff, J. P., &
Garner, A. S. (2012)



“toxic stress, can result from strong, frequent, or prolonged activation of the body’s stress response systems in the absence of the buffering protection of a supportive, adult relationship.” P. e236

Interventions: compassionate, giving control back to parent/child; psychoeducation on effects of trauma; teaching coping skills; encouraging co-regulation; offering support to child/teen and caregiver

Policy changes to change community situations (poverty, racism, immigration policies, lack of services) that exacerbate chronic stress

Neurobiology

How do ACEs affect health?

Through stress. Frequent or prolonged exposure to ACEs can create toxic stress which can damage the developing brain of a child and affect overall health.

Reduces the ability to respond, learn, or figure things out, which can result in problems in school.

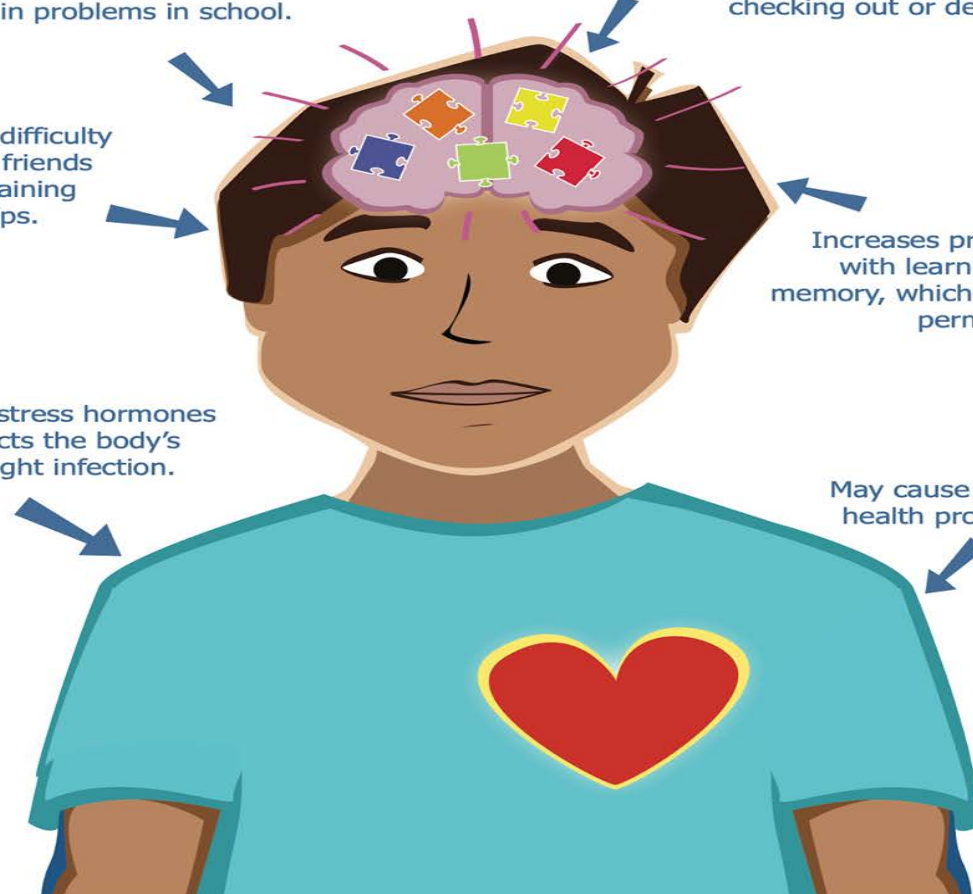
Lowers tolerance for stress, which can result in behaviors such as fighting, checking out or defiance.

Increases difficulty in making friends and maintaining relationships.

Increases problems with learning and memory, which can be permanent.

Increases stress hormones which affects the body's ability to fight infection.

May cause lasting health problems.



From: ACEsConnection

A Survival Mode Response to toxic stress increases a child's heart rate, blood pressure, breathing and muscle tension. Their thinking brain is knocked off-line. Self-protection is their priority. In other words:
"I can't hear you! I can't respond to you! I am just trying to be safe!"

HOW **STRESS** AFFECTS THE BODY

BRAIN

Difficulty concentrating, anxiety, depression, irritability, mood, mind fog

CARDIOVASCULAR

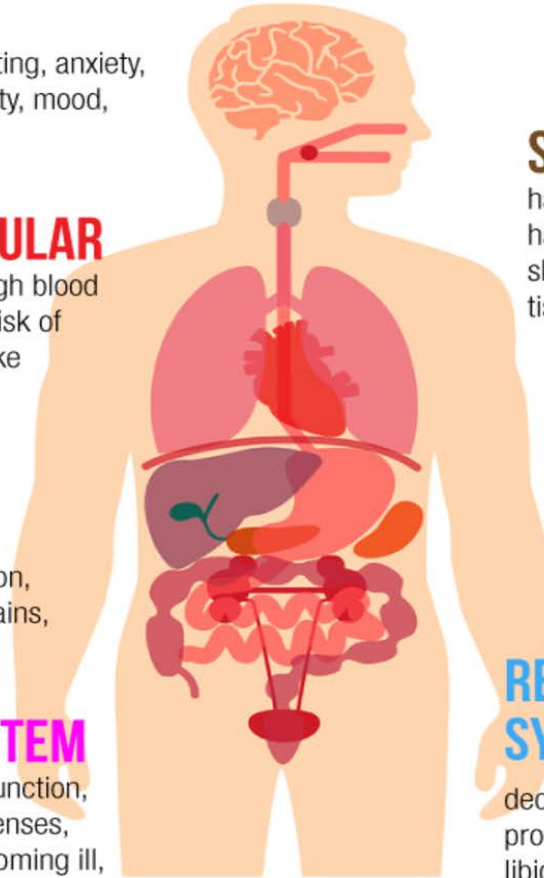
higher cholesterol, high blood pressure, increased risk of heart attack and stroke

JOINTS AND MUSCLES

increased inflammation, tension, aches and pains, muscle tightness

IMMUNE SYSTEM

decreased immune function, lowered immune defenses, increased risk of becoming ill, increase in recovery time



SKIN

hair loss, dull/brittle hair, brittle nails, dry skin, acne, delayed tissue repair

GUT

nutrient absorption, diarrhea, constipation, indigestion, bloating, pain and discomfort

REPRODUCTIVE SYSTEM

decreased hormone production, decrease in libido, increase in PMS symptoms

ACEs/Toxic Stress vs. Acute/Chronic Trauma

Impact of interventions to mitigate impact of ACES still under investigation

We don't yet know how hx of ACEs affect the youth's ability to perceive, process and heal from acute/chronic trauma in adolescence

-Or- individual impacts of different ACEs

Poverty in relation to ACES/trauma

Young adults in N. Philadelphia stated that watching their parents stress over finances MORE traumatic than physical abuse

- Single parenting but not divorce seen as a stressor

Youth living in E. Oakland critique PTSD screens as pathologizing survival skills : being on guard, sleep difficulties, not backing down from a fight

- Both groups expressed feeling a lack of love from parents/within themselves as a major stressor

For Children & Adolescents – Pediatric ACEs Screening and Related Life-events Screener (PEARLS) Tool

- PEARLS for children ages 0-11, to be completed by a caregiver
- PEARLS for adolescents 12-19, to be completed by a caregiver
- PEARLS for adolescents 12-19, self-reported

PEARLS identified OR de-identified acceptable - some evidence that more acceptable in pediatric settings

For Adults (20+) - ACES Screening Form developed by Kaiser

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 →

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:

PEARL Screener Parent Form 0-12, de-identified

<https://www.acesaware.org/wp-content/uploads/2019/12/PEARLS-Tool-Child-Parent-Caregiver-Report-De-Identified-English.pdf>

Available in 17 languages



Pediatric ACEs and Related Life Events Screener (PEARLS)

TEEN (Self-Report)- To be completed by: Patient

At any point in time since you were born, have you 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. Have you ever lived with a parent/caregiver who went to jail/prison?
2. Have you ever felt unsupported, unloved and/or unprotected?
3. Have you 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 you down?
5. Has your biological parent or any caregiver ever had, or currently has a problem with too much alcohol, street drugs or prescription medications use?
6. Have you ever lacked appropriate care by any caregiver?
(for example, not being protected from unsafe situations, or not being cared for when sick or injured even when the resources were available)
7. Have you ever seen or heard a parent/caregiver being screamed at, sworn at, insulted or humiliated by another adult?

Or have you 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 you?

Or has any adult in the household ever hit you so hard that you had marks or were injured?
Or has any adult in the household ever threatened you or acted in a way that made you afraid that you might be hurt?
9. Have you ever experienced sexual abuse?
(for example, has anyone touched you or asked you to touch that person in a way that was unwanted, or made you feel uncomfortable, or anyone ever attempted or actually had oral, anal, or vaginal sex with you)
10. Have there ever been significant changes in the relationship status of your 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:

PART 2:

1. Have you 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. Have you 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)
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6. Have you ever lived with a parent/caregiver who had a serious physical illness or disability?
7. Have you ever lived with a parent or caregiver who died?
8. Have you ever been detained, arrested or incarcerated?
9. Have you ever experienced verbal or physical abuse or threats from a romantic partners?
(for example, a boyfriend or girlfriend)

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

PEARL Screener Adolescent Self-Report, de-identified
<https://www.acesaware.org/wp-content/uploads/2019/12/PEARLS-Tool-Teen-Self-Report-De-Identified-English.pdf>

Available in 17 languages



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

PEARLS Study in PROCESS

Disrupting Toxic Stress in Children to Prevent Long-Term Health Impacts

By [Kate Vidinsky](#)



Grew out of FIND program at UC B CHO, led by Dayna Long, MD – currently a randomized controlled trial about value of interventions in reducing effects of toxic stress.

Children who screen + on PEARL questionnaire randomized to tailored interventions vs. group therapy, measure cortisol levels and other biomarkers over time

Discussing screening results & next steps



Awareness



Safety



Trustworthiness



Choice



Collaboration



Skills Building

Utilize the core principles of **trauma informed care** and systems to discuss screening results and next steps for children and families with elevated ACES scores



Positive screening – and how to present

Timely,
attuned

Right
model

Trauma-
informed

Strengths-
based

Engaging
family

Trauma-Informed Care

"What's wrong
with you?"

"What
happened to
you?"

"What's right
with you?"

Strengths-based approach is important in Trauma Treatment:

- 1) allows person responding to **feel known** more than just negative life events and corresponding problems
- 2) gives fuller picture, so that likelihood of “armoring” - the hard shell that workers can develop when faced with client problems that seem insurmountable, decreases, and **sense of manageability** increases
- 3) increases likelihood that strengths can be used during the **service delivery process**
- 4) in research it provides **richer understanding** of the relationship between the independent and dependent research variables and can **increase the explanatory power** of the analysis



TRAUMA-REACTIVE

- Fragmented
- Reactive
- No felt safety
- Overwhelmed
- Fear-driven
- Rigid
- Numb

- Understanding Trauma & Stress
- Cultural Humility & Equity
- Safety & Stability
- Compassion & Dependability
- Collaboration & Empowerment
- Resilience & Recovery



TRAUMA-INFORMED

- **Resists** re-traumatizing
- **Recognizes** socio-cultural trauma
- **Realizes** widespread impact
- **Recognizes** effects
- **Responds** by shifting practice



HEALING ORGANIZATION

- Integrated
- Reflective
- Collaborative
- Relationship-centered
- Growth and Prevention-oriented
- Flexible & adaptable
- Equitable & inclusive

TRAUMA INDUCING

TO

TRAUMA REDUCING

Strengths & challenges of implementing ACES screening in SBHC

- o Insert polleverywhere questions here

Strengths & challenges of implementing ACES screening in SBHC

o Strengths:

- Potential outreach to all students
- Ability to see frequently for follow-up, teaching coping skills, check in about readiness to address
- Potential collaboration with school personnel
- Flexible connections with caregivers

o Challenges:

- Current model emphasizes parental involvement – challenges when providing confidential care
- Need to develop model for addressing ACES with adolescent/young adult alone
- Involving stakeholders in parent organization, school

Strengths and challenges of implementing ACES screening during pandemic

o Strengths

- Research shows teens may be more comfortable screening on a computer/phone than in person or on paper
- Can be creative about questions (chat, yes/no) when confidentiality in home not possible
- Outreach may be easier with isolated/rural teens
- Teens with social anxiety may feel more comfortable on telehealth format

o Challenges

- Shelter in place exacerbates health inequities
- Youth without adequate cell or wifi connection may be cut out
- “deidentified” ACES screening may be more difficult, especially on phone or some web platforms
- More difficult to read “the room,” body language
- Youth may have less access to trusted SBHC staff (front desk, MA, HE)
- Less ability to drop in

Stepped-care model

Prevalence
PTSD: 4-8%

Furst M et al. The Integrated Mental Health Atlas of the Australian Capital Territory Primary Health Network Region
DOI - 10.13140/RG.2.2.18766.97606



Preventing ACES

<https://www.cdc.gov/violenceprevention/childabuseandneglect/acesstudy/ace-graphics.html>



Strengthen economic supports to families

- Strengthening household financial security
- Family-friendly work policies



Change social norms to support parents and positive parenting

- Public engagement and enhancement campaigns
- Legislative approaches to reduce corporal punishment



Provide quality care and education early in life

- Preschool enrichment with family engagement
- Improved quality of child care through licensing and accreditation



Enhance parenting skills to promote healthy child development

- Early childhood home visitation
- Parenting skill and family relationship approaches



Intervene to lessen harms and prevent future risk

- Enhanced primary care
- Behavioral parent training programs
- Treatment to lessen harms of abuse and neglect exposure
- Treatment to prevent problem behavior and later involvement in violence