Supporting Breastfeeding with Trauma-Informed Care

Applying the Science of Traumatic Stress

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Objectives

- Identify **principles of trauma-informed care** and how they are applied in healthcare for breastfeeding patients
- Understand the **neurobiology of trauma** and how symptoms of traumatic stress might manifest among breastfeeding patients
- Implement **strategies for trauma-informed care in practice**

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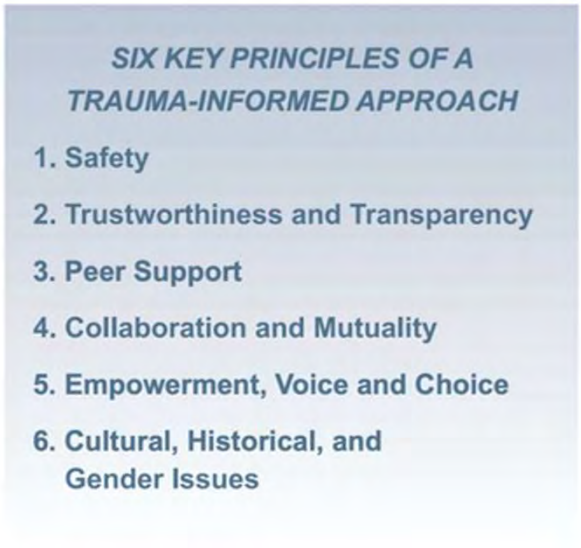
Trauma-Informed Care

Trauma-Informed Care: An approach to service delivery that understands the impact of trauma, recognizes and responds to trauma symptoms, and actively seeks to avoid triggers and retraumatization in care delivery.

Paradigm shift from
"What's wrong with you?" to
"What happened to you?"



SAMHSA, 2014

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Understanding the Neurobiology of Trauma

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Defining Trauma

- Trauma is defined as the experience of **violence and victimization** such as sexual abuse, physical abuse, severe neglect, loss, domestic violence, and/or the witnessing of violence, terrorism or disasters
- Involves both exposure to a traumatic event or experience and a psychological response of **fear, helplessness, terror, or horror**
- At least **65%** of adults in the United States experience a traumatic event in their lifetime; 10-25% of those individuals may go on to develop posttraumatic stress disorder (PTSD)

Breslau, 2009; Felitti et al., 1998

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How do trauma and stress affect health? Evidence from the Adverse Childhood Experiences (ACEs) Study

- 1980s, Kaiser Permanente San Diego: Dr. Vincent Felitti noticed a strong connection between obesity and childhood sexual abuse
- Suspected weight gain might be a coping mechanism for trauma
- Surveyed 17,000 healthy adults in the 1990s about 10 adverse childhood experiences (ACEs) and studied their relationship to later life health
    - Included both childhood trauma and other more common household stressors

Felitti et al., 1998

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Adverse Childhood Experiences (ACEs) Study

Verbal & emotional abuse
Physical abuse
Sexual abuse
Neglect
Parent divorce/separation
Household domestic violence
Parent substance use disorder
Parent mental illness
Parent incarceration

Felitti et al., 1998

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Adverse Childhood Experiences (ACEs) Study

Verbal & emotional abuse
Physical & sexual abuse
Sexual abuse
Neglect
Parent divorce/separation
Household domestic violence
Parent substance abuse
Parent mental illness
Parent incarceration

67% of adults reported **at least 1 ACE**
13% had **4 or more ACEs**

Felitti et al., 1998

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Adverse Childhood Experiences (ACEs) Study

Verbal & emotional abuse
Physical & sexual abuse
Sexual abuse
Neglect
Parent divorce/separation
Household domestic violence
Parent substance abuse
Parent mental illness
Parent incarceration

Alcoholism/alcohol abuse
Pulmonary disease
Depression
Fetal death
Quality of life
Illicit drug use
Ischemic heart disease
Liver disease
Intimate partner violence
Multiple sexual partners
STIs
Smoking
Suicide attempts
Unintended pregnancies
Early smoking
Early sexual activity
Adolescent pregnancy
Homelessness
Justice system involvement

Felitti et al., 1998

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Adverse Childhood Experiences (ACEs) Study

Verbal & emotional abuse
Physical & sexual abuse
Sexual abuse
Neglect
Parent divorce/separation
Household domestic violence
Parent substance abuse
Parent mental illness
Parent incarceration

Toxic Stress

Alcoholism/alcohol abuse
Pulmonary disease
Depression
Fetal death
Quality of life
Illicit drug use
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Intimate partner violence
Multiple sexual partners
STIs
Smoking
Suicide attempts
Unintended pregnancies
Early smoking
Early sexual activity
Adolescent pregnancy
Homelessness
Justice system involvement

Felitti et al., 1998

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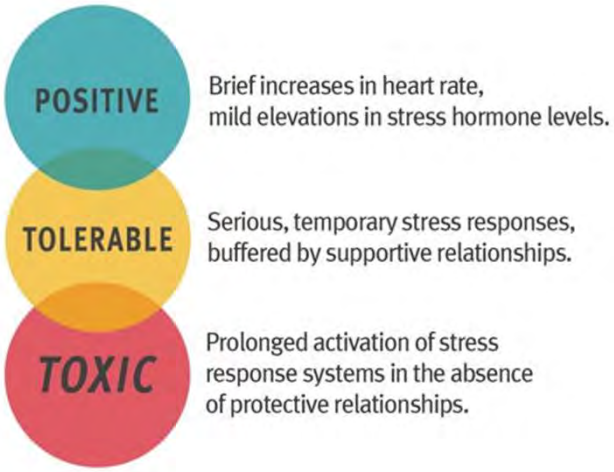
Adverse Childhood Experiences (ACEs) Study

Toxic stress: Response to strong, frequent, and/or prolonged adversity without adequate adult support.

- **Examples**: Physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, accumulated burdens of family economic hardship
- **Impact**: Disrupts the development of brain architecture and other organ systems



Harvard Center on the Developing Child

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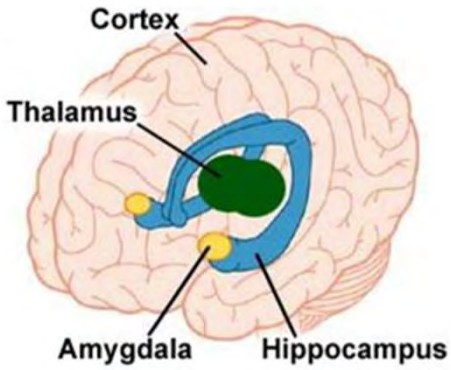
Neurobiology of Trauma & Stress

- Survival and threats: Fight, flight, or freeze
- Activation of stress response system: Hypothalamus-pituitary-adrenal (HPA) axis
  - Mobilizes a cascade of stress hormones designed to allow survival by fight or flight
- If fight/flight are not possible, freeze response turns on as a last resort
- Whole-body response to threats – but when threats pass, the body restores equilibrium



van der Kolk et al., 2003; Teicher et al., 2002

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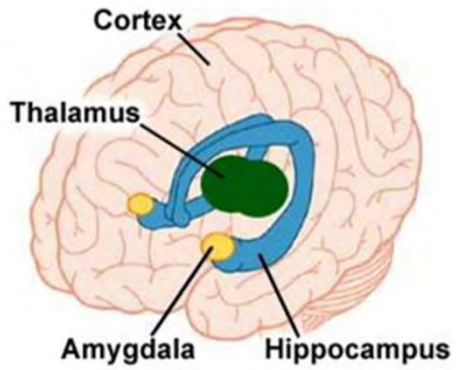
Neurobiology of Trauma & Stress

- **Toxic stress**: Ongoing threats in the absence of stress buffering results in continuous activation of HPA axis and flooding the body and brain with cortisol
- Dysregulates brain development, physiology, emotional regulation
- "Survival" brain will always circumvent the "learning and growing" brain when faced with threats



van der Kolk et al., 2003; Shonkoff et al., 2012; Teicher et al., 2002

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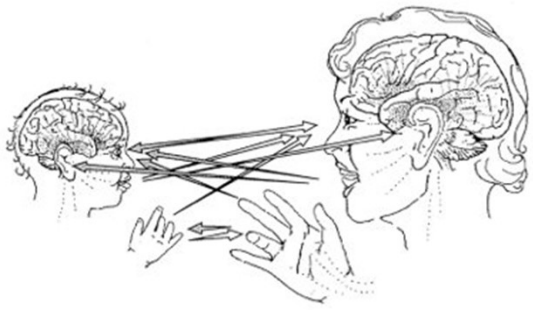
Neurobiology of Trauma & Stress

- Neurobiology is profoundly interpersonal – children have a **biological imperative** for secure attachment in early childhood
- Secure attachment is the foundation for regulating stress response systems
  - Attunement and co-regulation of emotional and physiological states teach children to self-regulate
- Caregivers who are frightening, violent, unpredictable, or unavailable can disrupt secure attachment and brain development



Ford & Courtois, 2009; Teicher et al., 2002

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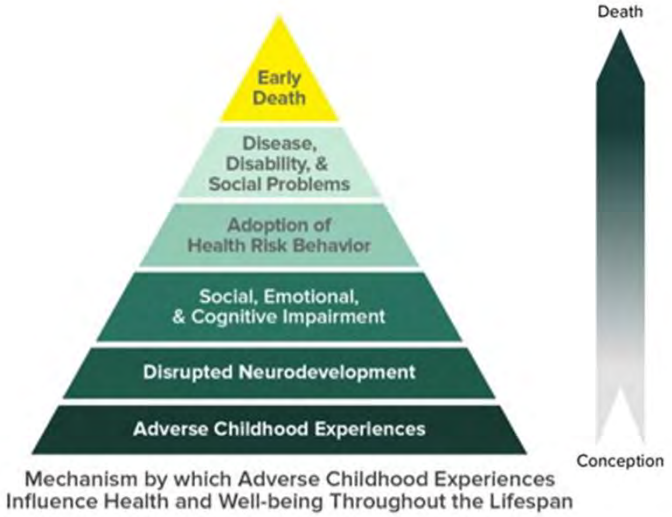
CDC-Kaiser ACE Pyramid



Centers for Disease Control and Prevention, 2015

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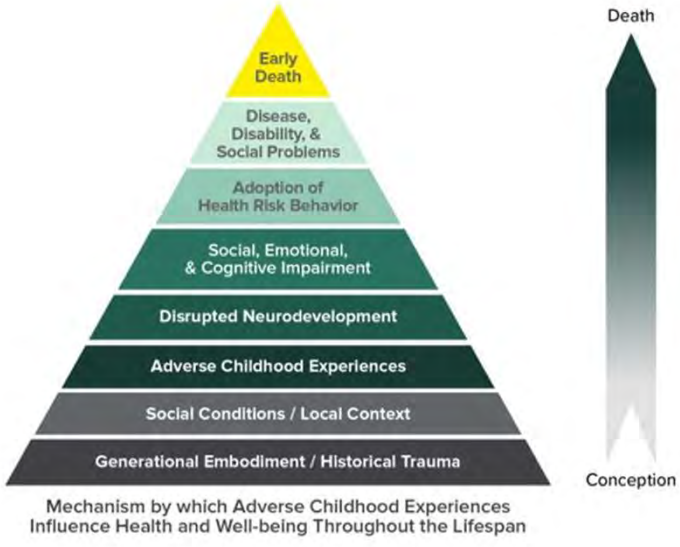
CDC-Kaiser ACE Pyramid

These 2 levels are new



Centers for Disease Control and Prevention, 2015

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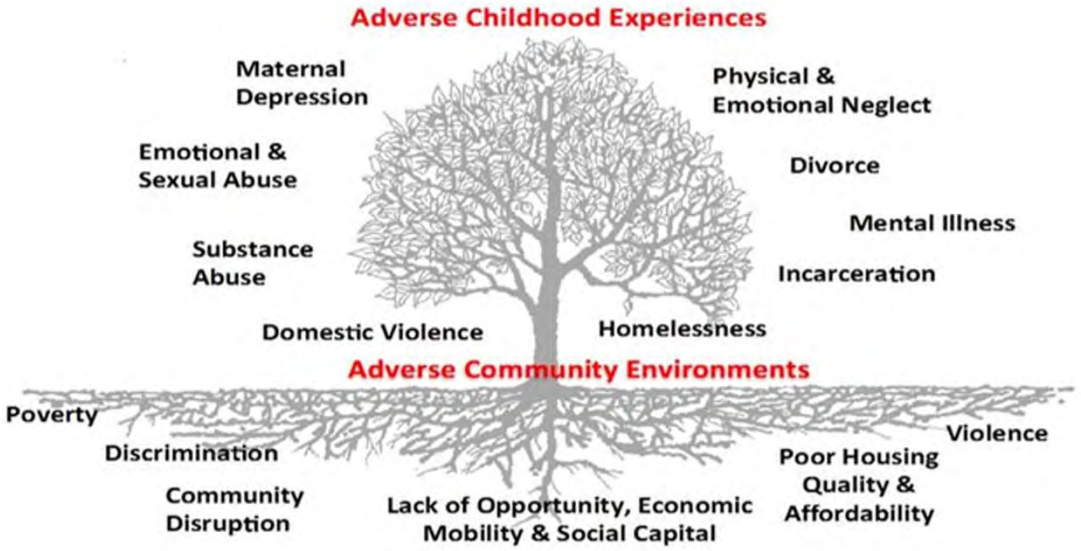
The Pair of ACEs



Ellis & Dietz, 2017

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Resilience and Protective Factors

Trauma and adversity are NOT destiny. There is a large literature on resilience, posttraumatic growth, and strengths/protective factors.

Item	Question
1	Did you have at least one caregiver with whom you felt safe?
2	Did you have at least one good friend?
3	Did you have beliefs that gave you comfort?
4	Did you like school?
5	Did you have at least one teacher who cared about you?
6	Did you have good neighbors?
7	Was there an adult (not a parent/caregiver or the person from #1) who could provide you with support or advice?
8	Did you have opportunities to have a good time?
9	Did you like yourself or feel comfortable with yourself?
10	Did you have a predictable home routine, like regular meals and a regular bedtime?

Narayan et al., 2018

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Resilience and Protective Factors

- The *most common* response to trauma is recovery – our bodies have biological stress response systems that allow us to regulate trauma and stress
- Although most people will experience traumatic events in their lifetime, only 10-25% of those individuals go on to develop posttraumatic stress disorder

Breslau, 2009

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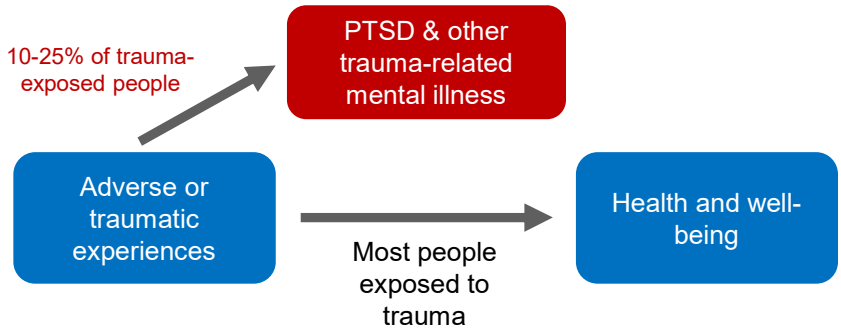

Breslau, 2009

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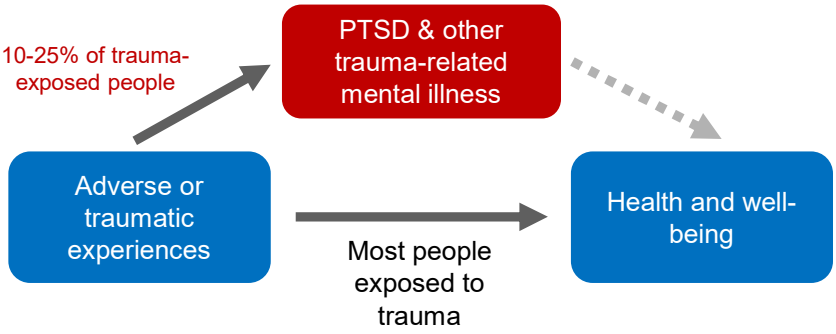

Breslau, 2009

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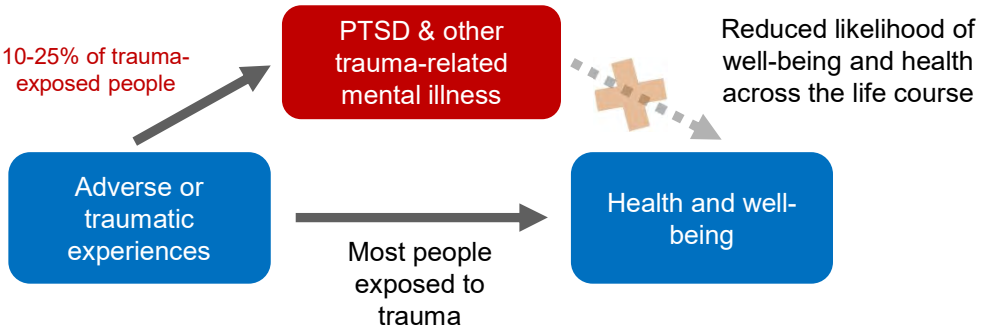

Breslau, 2009

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Trauma and Breastfeeding

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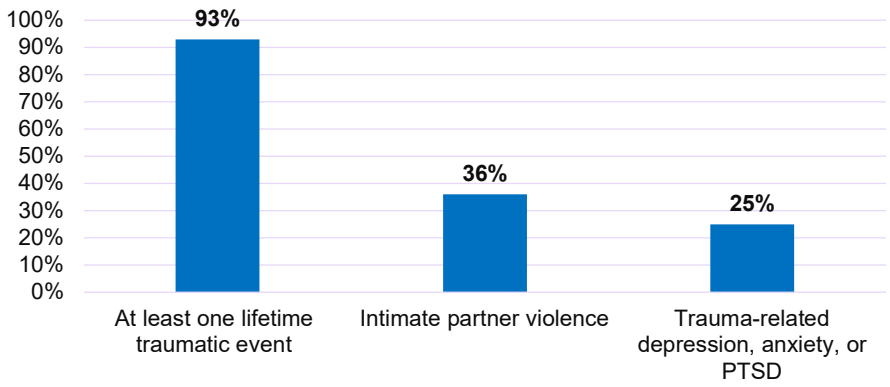
What do we know about how trauma affects breastfeeding?

Among pregnant women in the US…



Seng et al., 2014

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What do we know about how trauma affects breastfeeding?

Research is **mixed** on the relationship between trauma and breastfeeding.

- Child maltreatment has been associated with ***lower*** likelihood of breastfeeding initiation, exclusive breastfeeding, early breastfeeding discontinuation, and medical complications of breastfeeding in some studies
- …but other studies find ***higher*** likelihood of breastfeeding intention and initiation, or no association between trauma and breastfeeding
- Some people who have experienced trauma find breastfeeding to be difficult or retraumatizing, while others find it to be healing and empowering

Kendall-Tackett, 2022

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What do we know about how trauma affects breastfeeding?

- Breastfeeding cessation more likely if people experienced…
  - More severe types of interpersonal trauma (e.g., sexual abuse)
  - Multiple types of trauma and violence
  - Both childhood and adulthood trauma
  - Recent violence
  - Known perpetrator

Channel Doig et al., 2020; Kendall-Tackett, 2022

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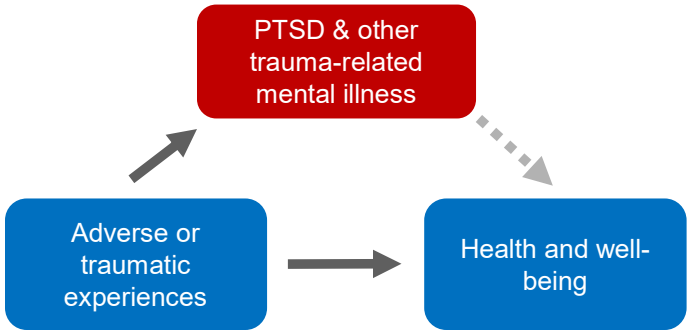
Why does trauma affect breastfeeding for some, but not others?

Risk is not ACEs themselves, but the trauma sequelae that follow—and some types of trauma create increase likelihood of trauma sequelae

- Developmental timing (critical and sensitive windows)
- Interpersonal trauma & relationship to perpetrator
- Frequency
- Severity
- Number of types
- Presence of protective factors (caregivers)
- Social determinants of health



Breslau, 2009; Kendall-Tackett, 2022

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Breastfeeding Offers Protection Against Trauma

Attenuates toxic stress

- Reduces depression, anxiety, irritability, trauma stress symptoms
- Increases bonding and attachment, sleep quality, subjective sense of well-being
- Reduces physiological stress

Breaks cycles of intergenerational trauma

- Breastfeeding ≥4 months associated with 3.8 times lower likelihood of neglect and 2.6 times lower likelihood of abuse (improved bonding)

Channel Doig et al., 2020; Kendall-Tackett, 2022

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Recognizing & Responding to Trauma in Breastfeeding Patients

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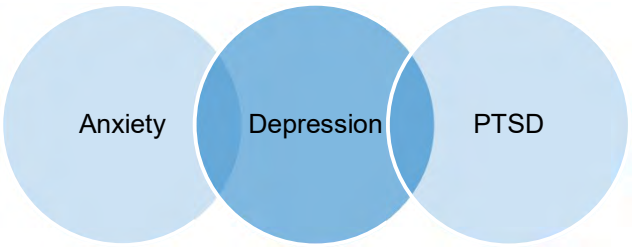
How does trauma manifest in the lives of breastfeeding patients?

- **Depression** is the #1 most common adverse outcome of childhood trauma during the perinatal period
- **Other common sequelae**: Anxiety, PTSD, impaired parent-infant bonding, risk for infant neglect or maltreatment



Seng et al., 2014

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Trauma Symptoms & Impact

Short-Term:
- Physical injury
- Fear or terror
- Anxiety
- Anger
- Loss of control
- Confusion
- Feelings of powerlessness
- Numbness
- Self-blame
- Shame or guilt
- Confusion
- Sleeplessness
- Nightmares

Long-Term:
- Substance use disorders
- Suicidality
- Dissociative disorders
- Eating disorders
- Sleep disorders
- Depression
- Flashbacks
- Panic
- Interpersonal sensitivity
- Difficulty with assertiveness, intimacy, self-esteem, conflict resolution, trusting others

SAMHSA, 2014

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Trauma-Informed Care

Presume that *every person* in the treatment setting has likely been exposed to abuse, neglect, persistently overwhelming stress, or other traumatic experiences (because most of us have) and act accordingly to offer a trauma-informed approach to care.

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Trauma-Informed Care in Practice

Respond with empathy, sensitivity, and active listening

- Show respect for all clients
- Value connection with others and recognize clients' need for connection as a legitimate objective
- Express compassion, warmth, support, empathy, authenticity, humility, and sensitivity
- View clients as active participants in their health and wellness
- Let the patient know that they are not the only one—normalize the fact that many people have had traumatic experiences and that the client is not alone

SAMHSA, 2014; Sperlich et al., 2017

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Trauma-Informed Care in Practice

Invite disclosure in conversations and interviews by making questions about trauma relevant to the patient and their mental health

Example 1: "I'm required to ask you this question as a mandatory reporter. Have you had any traumatic experiences?

This framework communicates that the provider does not really care about the patient's experiences an only invites a "no."

Choi & Seng, 2014; SAMHSA, 2014; Sperlich et al., 2017

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Trauma-Informed Care in Practice

Invite disclosure in conversations and interviews by making questions about trauma relevant to the patient and their mental health

Example 2 (Trauma-Informed): "Many patients find that traumatic experiences affect their experience of breastfeeding. Sometimes, even things that we've buried since we were children can come up during this time. Have you had any traumatic experiences that are affecting you now?"

Communicates that the patient's experiences are important and invites a conversation

Choi & Seng, 2014; SAMHSA, 2014; Sperlich et al., 2017

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Trauma-Informed Care in Practice

Restore power, control, and choice whenever possible

- Accommodate client preferences and allow control over care as much as possible.
  - Trauma robs the victim of a sense of power and control, and the guiding principle for recovery is restoration of control.
- Ask before conducting hands-on assessments
- If a client wants to stop an interview or procedure, respect their preferences
- Ask the client, "How can I help you? Is there anything specific you want me to do or not do during this exam?"
- Coercive interventions and interactions can be re-traumatizing and revictimization

Choi & Seng, 2014; SAMHSA, 2014; Sperlich et al., 2017

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Trauma-Informed Care in Practice

Team-based approaches to ACEs and trauma are essential to avoid retraumatization and triggers

- Communicating background information, disclosures, triggers, and successful approaches amongst the team and in EHR
  - ACE scores can be a helpful tool for communication - avoid redundant trauma screening when possible
- Prioritizing therapeutic communication, trust, and rapport: The team member the patient trusts most may not always be you
- Advocating for patient needs and priorities & accepting that our usual practices may not necessarily be best

Choi & Seng, 2014; SAMHSA, 2014; Sperlich et al., 2017

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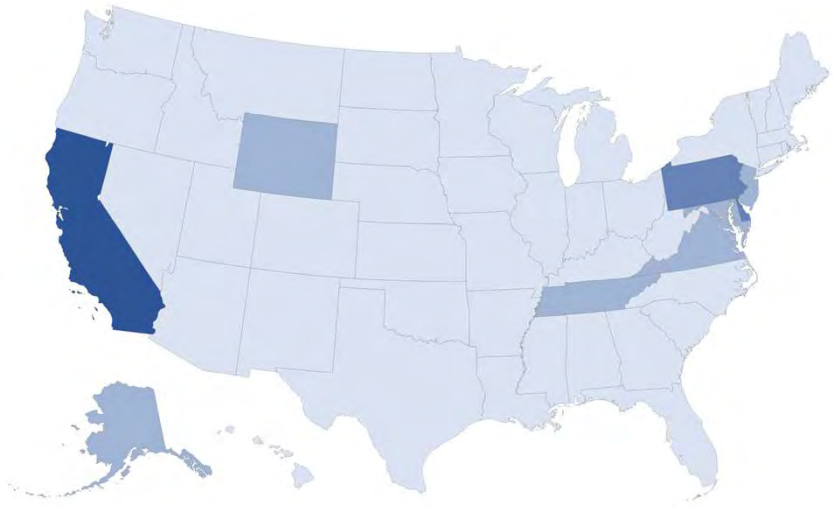
ACEs in Policy

9 states have taken meaningful action to address ACEs and/or trauma-informed care



National Governor's Association, 2021

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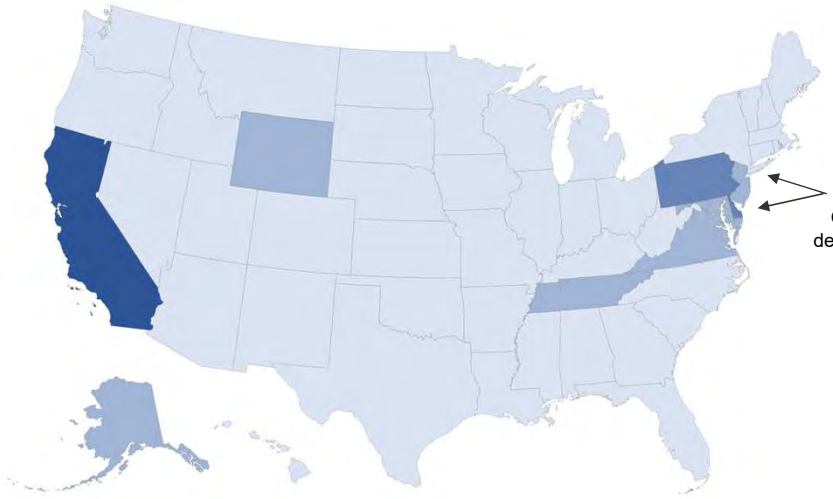
ACEs in Policy



Pennsylvania & Delaware:
Governors issued executive orders
declaring their states 'trauma-informed'

National Governor's Association, 2021

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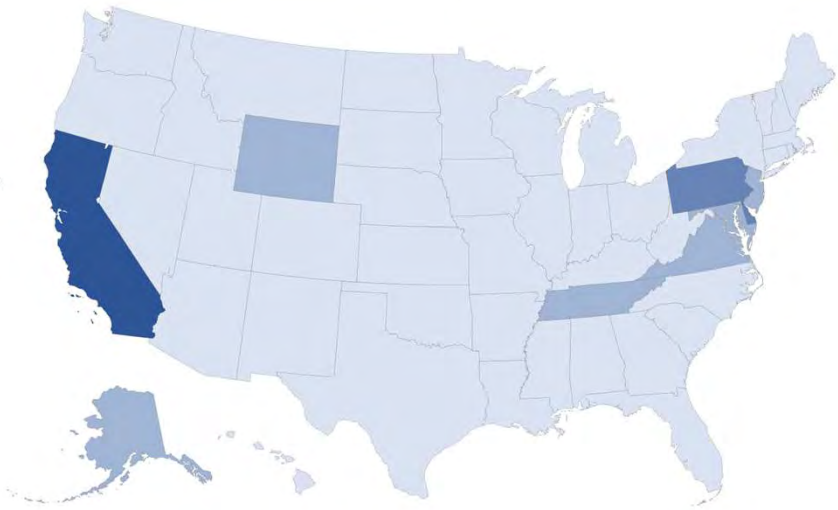
ACEs in Policy

California: ACEs Equity Act (2021), only state to reimburse ACE screening & national leader in ACE policy



National Governor's Association, 2021

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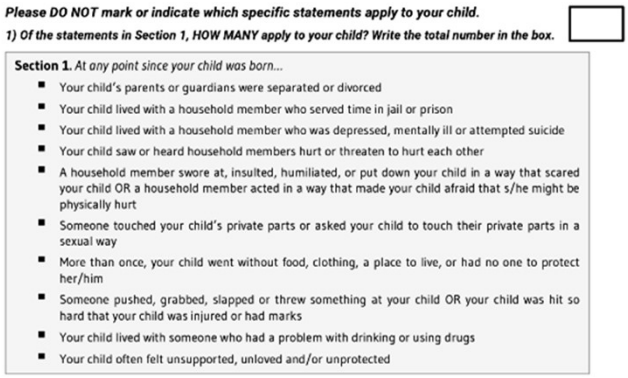
Screening for ACEs

Adverse childhood experiences questionnaire (ACE-Q):

- Parent and child versions
- Teen self-report screener
- English and Spanish available
- Guidance for healthcare providers
- <u>Key point</u>: **Assessing scores versus individual items**



Please DO NOT mark or indicate which specific statements apply to your child.

1) Of the statements in Section 1, HOW MANY apply to your child? Write the total number in the box.

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

ACEs Aware

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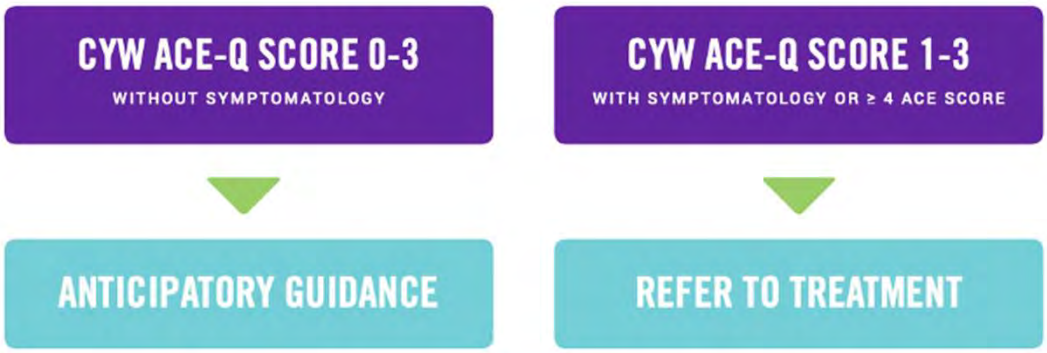
INTERPRETATION OF RESULTS

The completed CYW ACE-Q will have two scores: one for Section 1 *(original ten ACEs)*, and another for Section 2 *(supplementary items)*. If the patient's CYW ACE-Q score from both Section 1 and Section 2 equals zero to three *(0-3)* and the patient does not present with additional symptomatology *(see Relevant Symptomatology listed below)*, the Primary Care Provider should provide Anticipatory Guidance. If the patient's score is one to three *(1-3)* with symptomatology, or four or higher, an appropriate referral to care should be made.

FIGURE 2. CYW ACE-Q SCORING



ACEs Aware

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Adjunct Benevolent/Positive Childhood Experience Screening

Item	Question
1	Did you have at least one caregiver with whom you felt safe?
2	Did you have at least one good friend?
3	Did you have beliefs that gave you comfort?
4	Did you like school?
5	Did you have at least one teacher who cared about you?
6	Did you have good neighbors?
7	Was there an adult (not a parent/caregiver or the person from #1) who could provide you with support or advice?
8	Did you have opportunities to have a good time?
9	Did you like yourself or feel comfortable with yourself?
10	Did you have a predictable home routine, like regular meals and a regular bedtime?

Narayan et al., 2018

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Controversy about ACE Screening

- Capacity to provide trauma-informed care and evidence-based trauma interventions
- Scores versus individual experiences
- Impact of events
- Stressful household experience items - is it really an ACE?
- Exclusion of certain types of adversity, especially events that affect diverse communities

NCTSN, 2021

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Therapeutic Alliance

Trauma that happens in the context of relationships can only heal in the context of relationships. Growing the number and quality of adult relationships for children who have experienced trauma is the *most important* thing we can do.

Trauma and adversity are not destiny. Studies of resilience suggest that the ***most powerful*** buffer against trauma and toxic stress is having at least one safe, stable, consistent ***adult caregiver*** in a child's life (parent, family member, teacher, coach, neighbor, etc.)

Shonkoff et al., 2012

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Therapeutic Alliance

Therapeutic Alliance: Working relationship between a healthcare provider or therapist and a patient

- Alliance is achieved when patient and provider ***share the same goals*** for treatment and agree with the methods used to achieve goals
- In mental health, many studies indicate that one of the most powerful predictors of treatment success is the patient's sense of therapeutic alliance
- Patients receiving mental healthcare rate ***being an active listener*** the #1 most important characteristic of their nurses (Beech et al., 1995)

Trusting relationships are our most powerful clinical tool!

Beech & Norman, 1995; Elvins et al., 2008

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Setting Person-Centered Breastfeeding Goals

- "Successful" outcomes in breastfeeding are often defined as **compliance** with recommended public health breastfeeding guidelines
- **Concordance** is an alternative, person-centered adjunct measure of breastfeeding success that evaluates how closely a parent was able to follow their desired infant feeding plan
  - Emerging emphasis on patient-centered outcomes in healthcare
  - "Did this turn out the way I wanted, given my situation and what I was hoping?

Eagen-Torkko, 2019

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Setting Person-Centered Breastfeeding Goals

- Feeding goals may change over time, and so may concordance
- Concordance does ***not*** mean we ignore, discourage, or fail to support breastfeeding—rather, it is a way to recognize the success parents find infant feeding even in the face of challenges

Eagen-Torkko, 2019

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Summary

Trauma-Informed Practices for Breastfeeding
Be an active, empathetic listener
Invite disclosure by making questions about trauma relevant to the care you are providing
Restore power, control, and choice whenever possible
Communicate as a team to avoid retraumatization and triggers
Implement systematic trauma screening (consider with BCE/PCE screening) as a tool for broaching conversations about trauma and assessing risk/resilience
Develop authentic relationships and therapeutic alliance
Measure concordance as a person-centered breastfeeding outcome measure

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Secondary Trauma & Self-Care

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Secondary Trauma

- **Secondary Traumatic Stress (Vicarious Trauma)**: Trauma experienced as a result of exposure to a client's trauma and trauma reactions (also called compassion fatigue)
- Exposure can be through:
  - What a client tells you or says in your presence
  - The client's reactions to trauma reminders
  - Media reports, case reports, or other documents about the trauma

May cause: Intrusive images, nervousness or jumpiness, difficulty concentrating or taking in information, nightmares, insomnia, emotional numbing, changes in worldview, feelings of hopelessness/helplessness, anger, feeling disconnected from loved ones, physical symptoms

Beck, 2011; Pearlman & Mac Ian, 1995

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Self-Care and Management of Secondary Trauma

- Get enough sleep
- Eat well
- Be physically active
- Cultivate community and meaningful relationships
- Use alcohol/substances in moderation or not at all
- Take regular breaks from stressful activities, including clinical work when possible
- Let someone else take care of you
- Seek professional help if secondary trauma is significantly affecting your work, relationships, or other major areas of life

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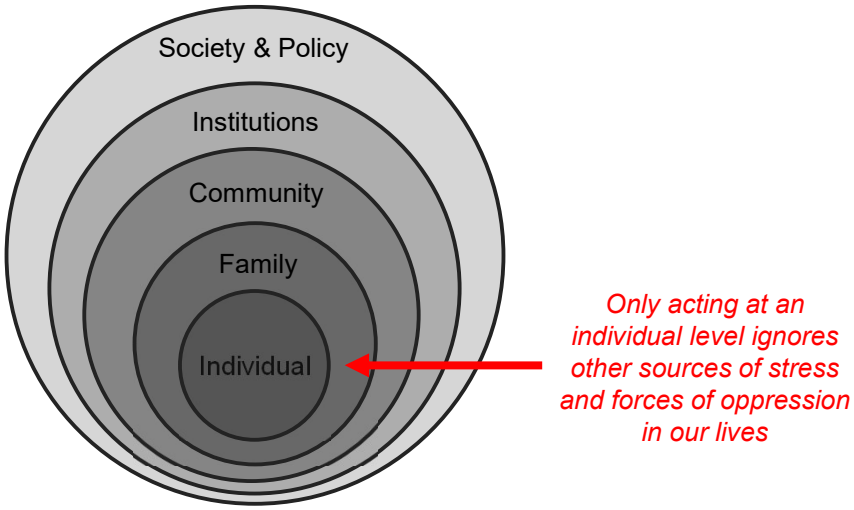
Managing Secondary Traumatic Stress



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Structural Strategies

Reclaim power and agency in systems that marginalize us. Collective bargaining, representation, policy advocacy, activism, and organizing can be powerful tools for changing systems and structures that produce inequities.

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Managing Secondary Traumatic Stress

"Caring for myself is not self-indulgence, it is self-preservation, and that is an act of political warfare"

—Audre Lorde

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References

- SAMHSA. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. https://store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf
- Breslau, N. (2009). The epidemiology of trauma, PTSD, and other posttrauma disorders. Trauma, Violence, & Abuse, 10(3), 198-210.
- Harvard Center on the Developing Child. Toxic stress. https://developingchild.harvard.edu/science/key-concepts/toxic-stress/
- Van der Kolk, B. A. (2003). The neurobiology of childhood trauma and abuse. *Child and Adolescent Psychiatric Clinics*, *12*(2), 293-317.
- Teicher, M. H., Andersen, S. L., Polcari, A., Anderson, C. M., & Navalta, C. P. (2002). Developmental neurobiology of childhood stress and trauma. *Psychiatric Clinics*, *25*(2), 397-426.
- Shonkoff, J. P., Garner, A. S., Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, and Section on Developmental and Behavioral Pediatrics, Siegel, B. S., Dobbins, M. I., Earls, M. F., ... & Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, *129*(1), e232-e246.
- Courtois, C. A., & Ford, J. D. (Eds.). (2009). *Treating complex traumatic stress disorders: An evidence-based guide* (p. 82). New York: Guilford Press.
- Narayan, A. J., Rivera, L. M., Bernstein, R. E., Harris, W. W., & Lieberman, A. F. (2018). Positive childhood experiences predict less psychopathology and stress in pregnant women with childhood adversity: A pilot study of the benevolent childhood experiences (BCEs) scale. *Child abuse & neglect*, *78*, 19-30.
- Seng, J. S., D'Andrea, W., & Ford, J. D. (2014). Complex mental health sequelae of psychological trauma among women in prenatal care. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*(1), 41.
- Kendall-Tackett, K. (2022). Psychological Trauma and Breastfeeding: What We Know So Far. *Medical Research Archives*, *10*(11).
- Channell Doig, A., Jasczynski, M., Fleishman, J. L., & Aparicio, E. M. (2020). Breastfeeding among mothers who have experienced childhood maltreatment: A review. *Journal of human lactation*, *36*(4), 710-722.
- Sperlich, M., Seng, J. S., Li, Y., Taylor, J., & Bradbury-Jones, C. (2017). Integrating trauma-informed care into maternity care practice: conceptual and practical issues. *Journal of midwifery & women's health*, *62*(6), 661-672.
- Choi, K., & Seng, J. S. (2014). Trauma-informed care with childhood maltreatment survivors: what do maternity professionals want to learn. *International Journal of Childbirth*, *4*(3), 191-201.
- ACEs Aware. Screening tools. https://www.acesaware.org/
- National Child Traumatic Stress Network. (2021). Beyond the ACE score: Perspectives from the NCTSN on child trauma and adversity screening and impact. https://www.nctsn.org/resources/beyond-the-ace-score-perspectives-from-the-nctsn-on-child-trauma-and-adversity-screening-and-impact
- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical psychology review*, *28*(7), 1167-1187.
- Beech, P., & Norman, I. J. (1995). Patients' perceptions of the quality of psychiatric nursing care: findings from a small-scale descriptive study. *Journal of Clinical Nursing*, *4*(2), 117-123.
- Eagen-Torkko, M. (2019). Concordance as a person-centered measure of breastfeeding success: from adequacy to agency. *Journal of Midwifery & Women's Health*, *64*(6), 749-753.
- Eagen-Torkko, M. K. (2015). *Compliance and concordance: Prevalence and predictors of breastfeeding in survivors of childhood abuse* (Doctoral dissertation, University of Michigan).
- Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of psychiatric nursing*, *25*(1), 1-10
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional psychology: Research and practice*, *26*(6), 558.
- Siegel, D. J. (2009). Mindful awareness, mindsight, and neural integration. *The Humanistic Psychologist*, *37*(2), 137-158.

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