


Adverse Childhood Events & Trauma Informed Care



Behavioral Health TeleECHO Clinic
March 17, 2020

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Adverse Childhood Events (ACEs)

● What are they?

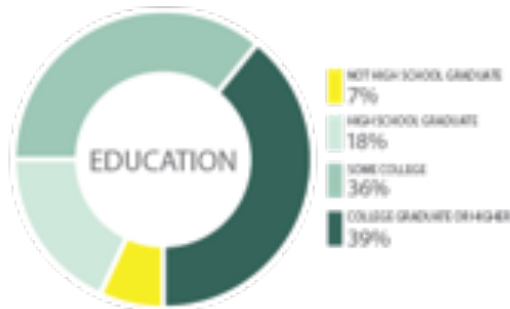
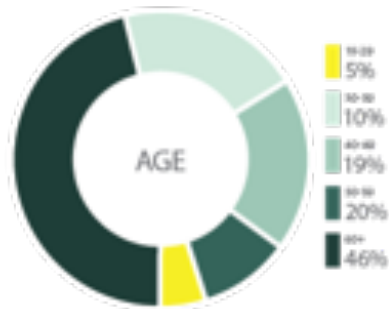
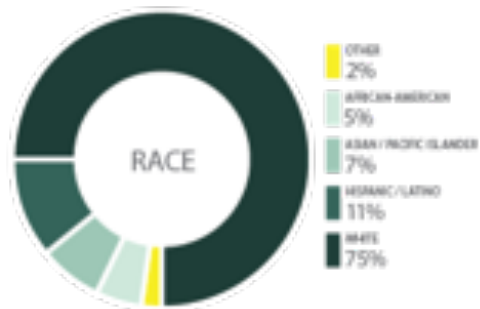
- Adverse Childhood Experiences, or ACEs, are potentially traumatic events that occur in childhood (0-17 years)
- Examples include:
 - Experiencing violence or abuse
 - Witnessing violence in home or community
 - Having a family member attempt or die by suicide
- Between 1995 - 1997 Kaiser Permanente conducted a study to determine prevalence of ACEs

WHAT ARE ACEs?

Adverse Childhood Experiences (ACEs) is the term given to describe all types of abuse, neglect, and other traumatic experiences that occur to individuals under the age of 18. The landmark Kaiser ACE Study examined the relationships between these experiences during childhood and reduced health and well-being later in life.

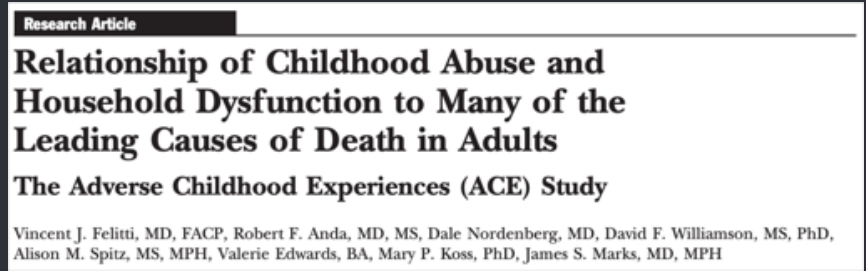
WHO PARTICIPATED IN THE ACE STUDY?

Between 1995 and 1997, over 17,000 people receiving physical exams completed confidential surveys containing information about their childhood experiences and current health status and behaviors. The information from these surveys was combined with results from their physical exams to form the study's findings.



*Participants in this study reflected a cross-section of middle-class American adults.

• ACEs study



- Study had a **70.5%** response rate
- Categories studied:
 - Psychological
 - Physical or sexual abuse
 - Violence against mother
 - Living with household members who were:
 - Substance users
 - Mentally ill or suicidal
 - Imprisoned

• Some ACE definitions

• Abuse

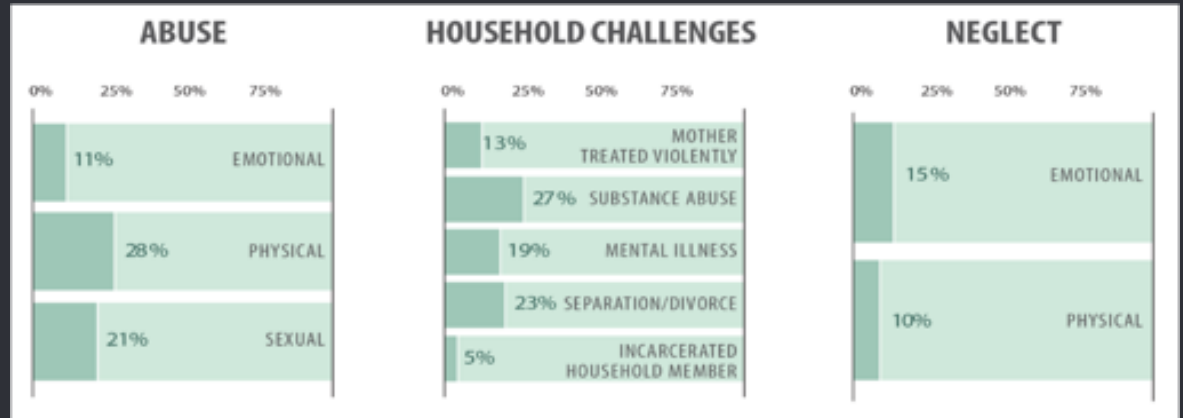
- **Emotional abuse:** A parent or other adult in your home ever swore at you, insulted you, or put you down.
- **Physical abuse:** A parent or other adult in your home ever hit, beat, kicked or physically hurt you.
- **Sexual abuse:** An adult or person at least 5 years older ever touched you in a sexual way, or tried to make you touch their body in a sexual way, or attempted to have sex with you.

• Household Challenges

- **Intimate partner violence:** 2 Parents or adults in home ever slapped, hit, kicked, punched or beat each other up.
- **Substance abuse in the household:** A household member was a problem drinker or alcoholic or used street drugs or abused prescription medications.
- **Mental illness in the household:** A household member was depressed or mentally ill or a household member attempted suicide.
- **Parental separation or divorce:** Parents were ever separated or divorced.
- **Incarcerated household member:** A household member went to prison.

• What Happened Next?

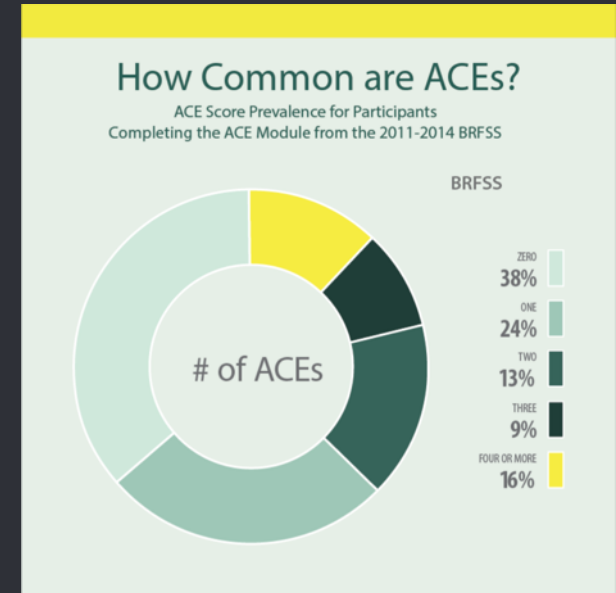
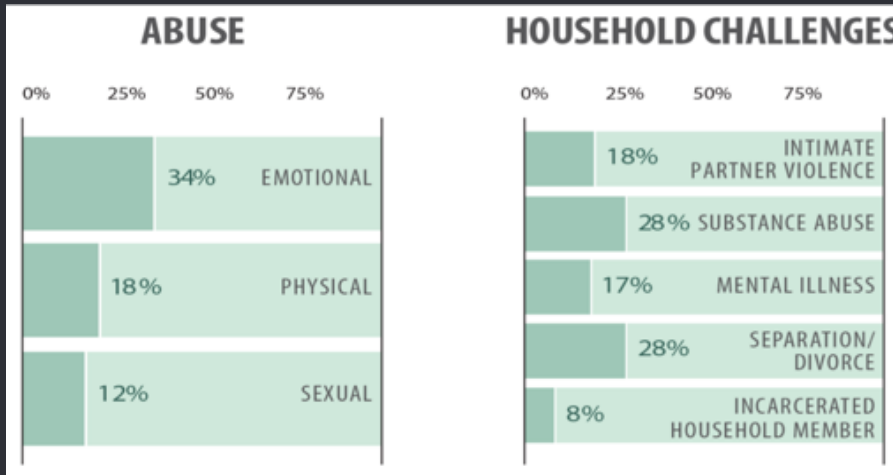
- **CDC** paired with Kaiser Permanente to continue research initiatives, sample increased to 17,337
- Their Data:



Centers for Disease Control and Prevention, Kaiser Permanente. The ACE Study Survey Data [Unpublished Data]. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2016.

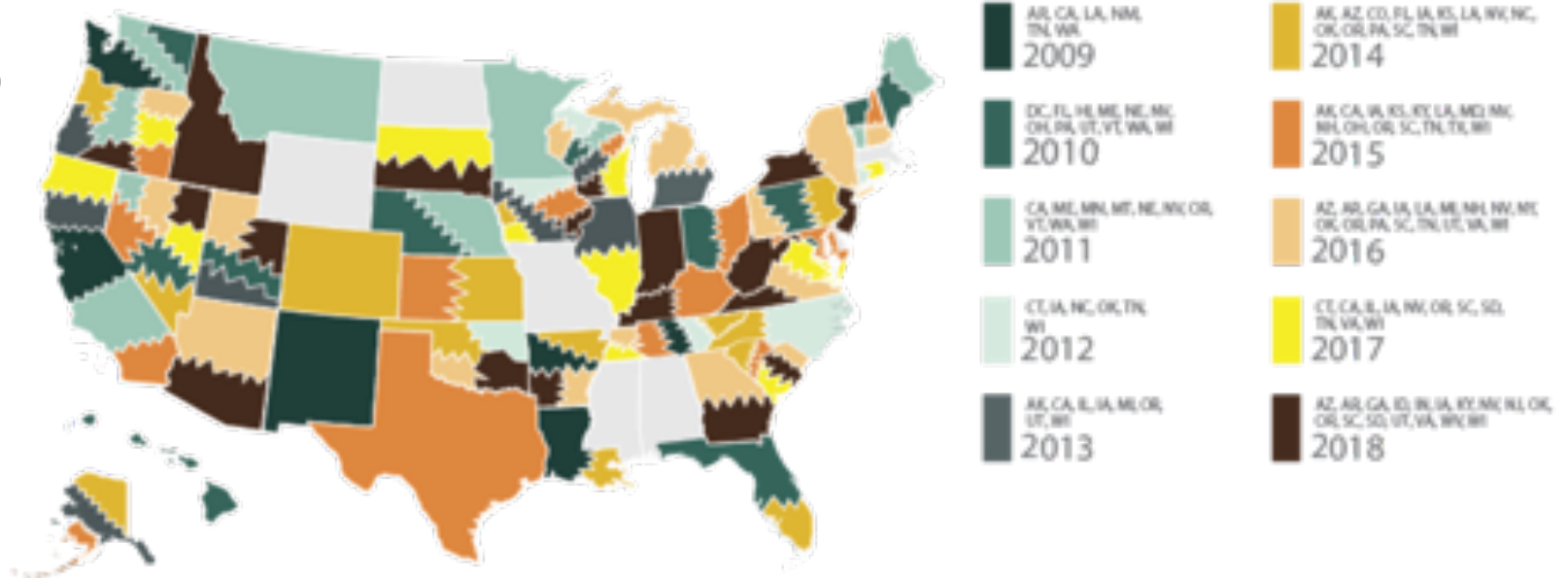
• What Happened Next?

- **CDC** also began to collect data through their Behavioral Risk Factor Surveillance System (BRFFS) since 2009



Merrick, M.T., Ford, D.C., Ports, K. A., Guinn, A. S. (2018). Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States. *JAMA Pediatrics*, 172(11), 1038-1044.

Collecting BRFSS ACE Data by Year, 2009-2018



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System Survey ACE Data, 2009-2018. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2019.



61% of adults
in 25 surveyed states had
experienced at least 1 ACE

Nearly 1 in 6 reported the experienced 4 or
more types of ACEs

Data from 2011-2014 surveys,
n=214,157

Why is it important?

Could potentially reduce a large number of health conditions.

Exposure to ACEs was found to correlate to a number of adverse events in adulthood



Table 4. Number of categories of adverse childhood exposure and the adjusted odds of risk factors including current smoking, severe obesity, physical inactivity, depressed mood, and suicide attempt

Health problem	Number of categories	Sample size (N) ^a	Prevalence (%) ^b	Adjusted odds ratio ^c	95% confidence interval
Current smoker ^d	0	3,836	6.8	1.0	Referent
	1	2,005	7.9	1.1	(0.9–1.4)
	2	1,046	10.3	1.5	(1.1–1.8)
	3	587	13.9	2.0	(1.5–2.6)
	4 or more	544	16.5	2.2	(1.7–2.9)
	Total	8,018	8.6	—	—
Severe obesity ^d (BMI ≥ 35)	0	3,850	5.4	1.0	Referent
	1	2,004	7.0	1.1	(0.9–1.4)
	2	1,041	9.5	1.4	(1.1–1.9)
	3	590	10.3	1.4	(1.0–1.9)
	4 or more	543	12.0	1.6	(1.2–2.1)
	Total	8,028	7.1	—	—
No leisure-time physical activity	0	3,634	18.4	1.0	Referent
	1	1,917	22.8	1.2	(1.1–1.4)
	2	1,006	22.0	1.2	(1.0–1.4)
	3	559	26.6	1.4	(1.1–1.7)
	4 or more	523	26.6	1.3	(1.1–1.6)
	Total	7,639	21.0	—	—
Two or more weeks of depressed mood in the past year	0	3,799	14.2	1.0	Referent
	1	1,984	21.4	1.5	(1.3–1.7)
	2	1,036	31.5	2.4	(2.0–2.8)
	3	584	36.2	2.6	(2.1–3.2)
	4 or more	542	50.7	4.6	(3.8–5.6)
	Total	7,945	22.0	—	—
Ever attempted suicide	0	3,852	1.2	1.0	Referent
	1	1,997	2.4	1.8	(1.2–2.6)
	2	1,048	4.3	3.0	(2.0–4.6)
	3	587	9.5	6.6	(4.5–9.8)
	4 or more	544	18.3	12.2	(8.5–17.5)
	Total	8,028	3.5	—	—

Felitti et al. “Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experience (ACE) Study.” *Am J Prev Med.* 1998; 14(4).

Table 5. Number of categories of adverse childhood exposure and the prevalence and risk (adjusted odds ratio) of health risk factors including alcohol or drug abuse, high lifetime number of sexual partners, or history of sexually transmitted disease

Health problem	Number of categories	Sample size (N) ^a	Prevalence (%) ^b	Adjusted odds ratio ^c	95% confidence interval
Considers self an alcoholic	0	3,841	2.9	1.0	Referent
	1	1,993	5.7	2.0	(1.6–2.7)
	2	1,042	10.3	4.0	(3.0–5.3)
	3	586	11.3	4.9	(3.5–6.8)
	4 or more	540	16.1	7.4	(5.4–10.2)
	Total	8,002	5.9	—	—
Ever used illicit drugs	0	3,856	6.4	1.0	Referent
	1	1,998	11.4	1.7	(1.4–2.0)
	2	1,045	19.2	2.9	(2.4–3.6)
	3	589	21.5	3.6	(2.8–4.6)
	4 or more	541	28.4	4.7	(3.7–6.0)
	Total	8,029	11.6	—	—
Ever injected drugs	0	3,855	0.3	1.0	Referent
	1	1,996	0.5	1.3	(0.6–3.1)
	2	1,044	1.4	3.8	(1.8–8.2)
	3	587	2.3	7.1	(3.3–15.5)
	4 or more	540	3.4	10.3	(4.9–21.4)
	Total	8,022	0.8	—	—
Had 50 or more intercourse partners	0	3,400	3.0	1.0	Referent
	1	1,812	5.1	1.7	(1.3–2.3)
	2	926	6.1	2.3	(1.6–3.2)
	3	526	6.3	3.1	(2.0–4.7)
	4 or more	474	6.8	3.2	(2.1–5.1)
	Total	7,138	4.4	—	—
Ever had a sexually transmitted disease ^d	0	3,848	5.6	1.0	Referent
	1	2,001	8.6	1.4	(1.1–1.7)
	2	1,044	10.4	1.5	(1.2–1.9)
	3	588	13.1	1.9	(1.4–2.5)
	4 or more	542	16.7	2.5	(1.9–3.2)
	Total	8,023	8.2	—	—

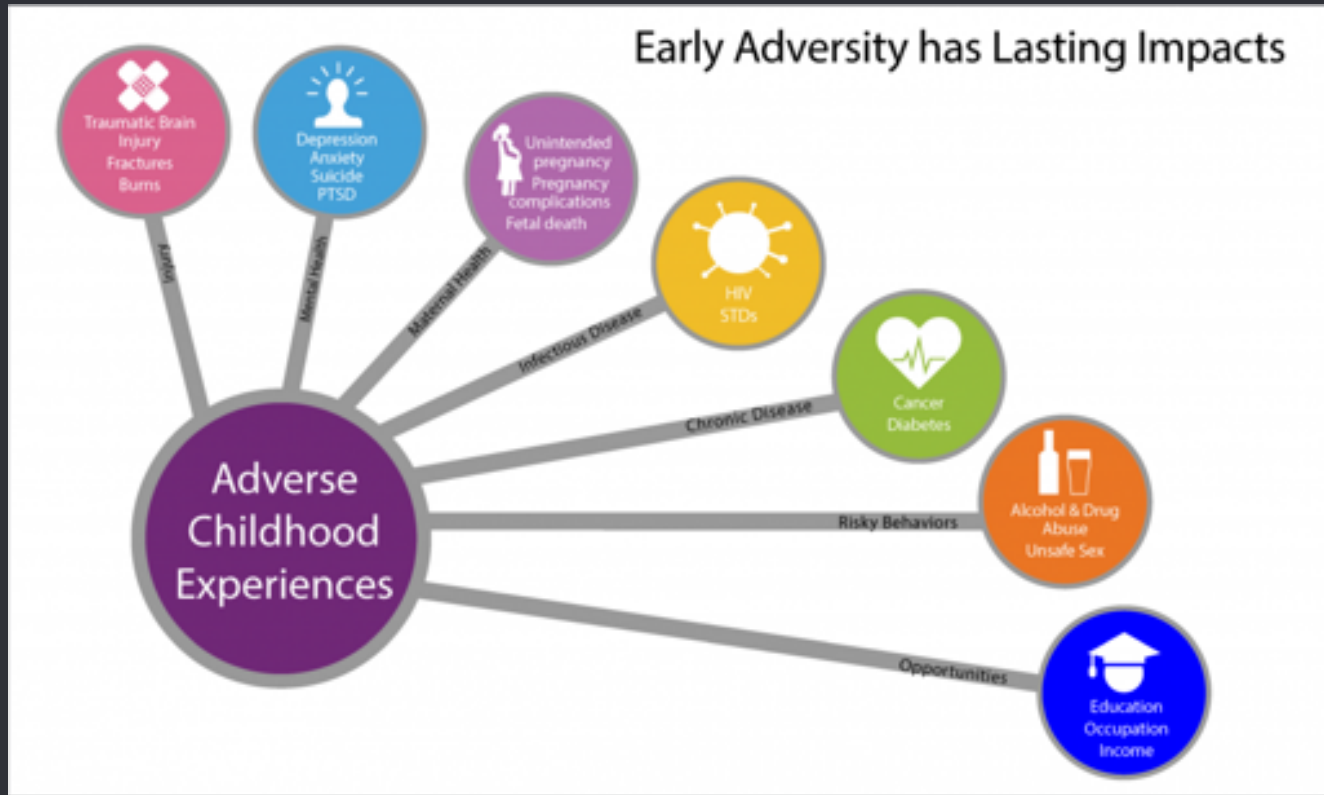
Felitti et al. "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experience (ACE) Study." *Am J Prev Med* 1998; 14(4).

Table 7. Number of categories of adverse childhood exposure and the prevalence and risk (adjusted odds ratio) of heart attack, cancer, stroke, COPD, and diabetes

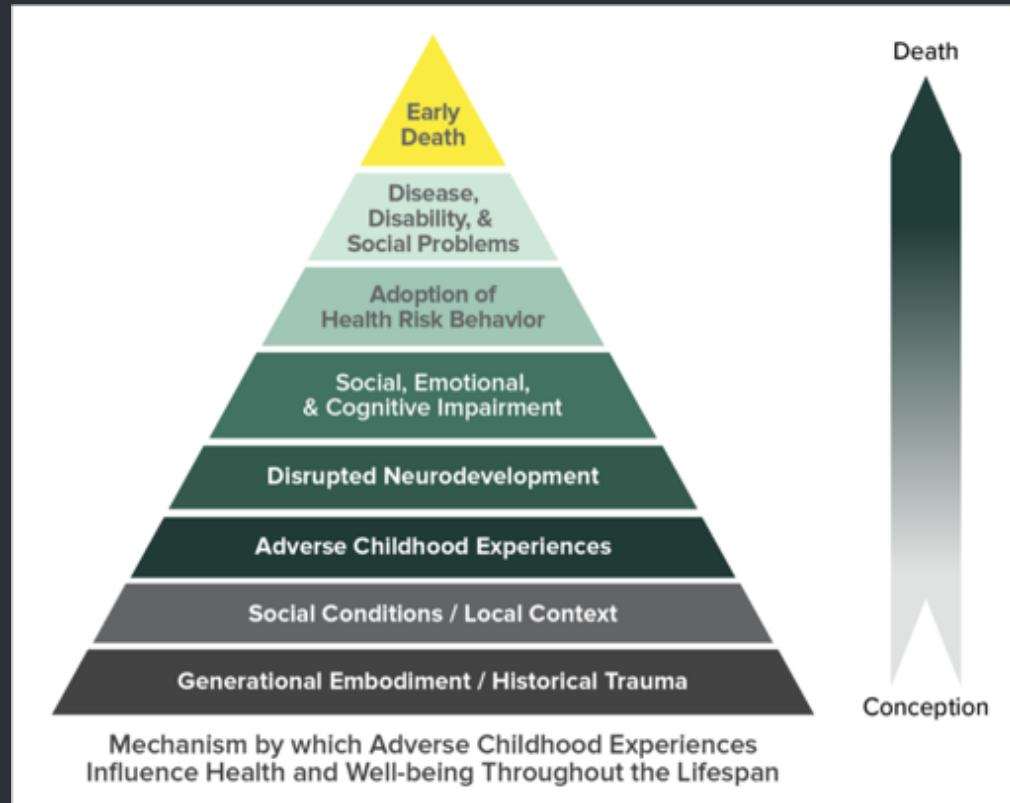
Disease condition ^d	Number of categories	Sample size (N) ^a	Prevalence (%) ^b	Adjusted odds ratio ^c	95% confidence interval
Ischemic heart disease	0	3,859	3.7	1.0	Referent
	1	2,009	3.5	0.9	(0.7–1.3)
	2	1,050	3.4	0.9	(0.6–1.4)
	3	590	4.6	1.4	(0.8–2.4)
	4 or more	545	5.6	2.2	(1.3–3.7)
	Total	8,022	3.8	—	—
Any cancer	0	3,842	1.9	1.0	Referent
	1	1,995	1.9	1.2	(1.0–1.5)
	2	1,043	1.9	1.2	(1.0–1.5)
	3	588	1.9	1.0	(0.7–1.5)
	4 or more	543	1.9	1.9	(1.3–2.7)
	Total	8,011	1.9	—	—
Stroke	0	3,832	2.6	1.0	Referent
	1	1,993	2.4	0.9	(0.7–1.3)
	2	1,042	2.0	0.7	(0.4–1.3)
	3	588	2.9	1.3	(0.7–2.4)
	4 or more	543	4.1	2.4	(1.3–4.3)
	Total	7,998	2.6	—	—
Chronic bronchitis or emphysema	0	3,758	2.8	1.0	Referent
	1	1,939	4.4	1.6	(1.2–2.1)
	2	1,009	4.4	1.6	(1.1–2.3)
	3	565	5.7	2.2	(1.4–3.3)
	4 or more	512	8.7	3.9	(2.6–5.8)
	Total	7,783	4.0	—	—
Diabetes	0	3,850	4.3	1.0	Referent
	1	2,002	4.1	1.0	(0.7–1.3)
	2	1,046	3.9	0.9	(0.6–1.3)
	3	587	5.0	1.2	(0.8–1.9)
	4 or more	542	5.8	1.6	(1.0–2.5)
	Total	8,027	4.3	—	—

Felitti et al.
 “Relationship of
 Childhood Abuse and
 Household Dysfunction
 to Many of the Leading
 Causes of Death in
 Adults: The Adverse
 Childhood Experience
 (ACE) Study.” *Am J
 Prev Med.* 1998; 14(4).

Consequences of ACEs



Outcome Model



- ACEs can be prevented!



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

Fortson, B. L., Klevens, J., Merrick, M. T., Gilbert, L. K., & Alexander, S. P. (2016). Preventing child abuse and neglect: A technical package for policy, norm, and programmatic activities. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.



Trauma Informed Care

● Story of Kim

○ Kim is a 40-year-old survivor of childhood sexual abuse perpetrated by her father. Kim has suffered from untreated bouts of severe anxiety and depression ever since she was abused. When she was a 22-year-old, she went to a clinic for a Pap smear. The nurse told her to undress and lie on the exam table with her legs in the stirrups before she met the physician who would do her Pap smear. The physician entered the room, asked her a few quick questions, and then proceeded to do the Pap smear without explaining anything. Kim felt sudden, overwhelming terror, chest tightness, and palpitations. She says, “I felt like I left my body” and doesn’t remember what happened during the visit or how she got home. She never returned for Pap screening. Recently, after many years of very heavy vaginal bleeding, Kim fainted, was brought to the hospital, and diagnosed with advanced cervical cancer.

What did we learn from Kim and ACEs?

- Trauma is **common**
- Providers must be wary that **their patients have likely experienced trauma.**
- Requires an informed approach for navigating patient interactions.

Trauma Informed Care



<https://www.kqed.org/mindshift/53228/nine-ways-to-ensure-your-mindfulness-teaching-practice-is-trauma-informed>

Three E's of Trauma

1. Events

- May include the actual or extreme threat of physical or psychological harm
- Or severe, life-threatening neglect for a child that imperils healthy development

2. Experience

- The individual's experience of these events helps to determine whether it is felt to be traumatic
- A particular event could be traumatic for one individual, but not for another

3. Effects

- The long-lasting effects of the event are a critical component of trauma.
- Can occur immediately or have a delayed onset



● Health-Care Environments and Trauma

○ **Survivors** of trauma may be consciously or unconsciously **triggered** by sights, smells, sounds, and situations

- Excessive wait times
- Invasive procedures
- Need to undress
- Physicals restraint
- Inherent imbalance in power between the patient and providers

Often **patients do not fully comprehend** the connection between their **heightened emotional state** and their history of past trauma.

- Dissociation from the present moment
- Not able to recall important events
- Problems retaining important health-care instructions
- React in an overly aggressive or overly submissive manner (childhood trauma)

● Four R's of Trauma Informed Approach

1. **R**ealization

Understanding that trauma is common and can affect any individual

2. **R**ecognize

Being able to identify the signs of trauma

3. **R**esponds

Applies the principles of a trauma-informed approach to all areas of functioning

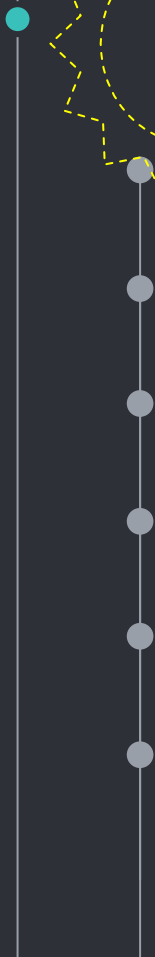
4. **R**esist Re-Traumatization

Being mindful to not cause inadvertently stressful environments.





Six Key Principles of Trauma-Informed Approach

- 
1. Safety
 2. Trustworthiness and Transparency
 3. Peer Support
 4. Collaboration and Mutuality
 5. Empowerment, Voice and Choice
 6. Cultural, Historical, and Gender Issues

Guiding Principles of Trauma Informed Care

SAMHSA's Concept of Trauma and guidance for a Trauma-Informed Approach, 2014 <http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf>

Safety

Throughout the organization, staff and the people they serve feel physically and psychologically safe.

Trustworthiness and transparency

Organizational operations and decisions are conducted with transparency and the goal of building and maintaining trust among staff, clients, and family members of those receiving services.

Peer support and mutual self-help

These are integral to the organizational and service delivery approach and are understood as a key vehicle for building trust, establishing safety, and empowerment.

Collaboration and mutuality

There is recognition that healing happens in relationships and in the meaningful sharing of power and decision-making. The organization recognizes that everyone has a role to play in a trauma-informed approach. One does not have to be a therapist to be therapeutic.

Empowerment, voice, and choice

Organization aims to strengthen the staff, client, and family members's experience of choice and recognizes that every person's experience is unique and requires an individualized approach. This builds on what clients, staff, and communities have to offer, rather than responding to perceived deficits.

Cultural, historical, and gender issues

The organization actively moves past cultural stereotypes and biases, offers culturally responsive services, leverages the healing value of traditional cultural connections, and recognizes and addresses historical trauma.



Resources

- Centers for Disease Control and Prevention. “Adverse Childhood Experiences (ACEs).” Accessed via: <https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/index.html>
- Centers for Disease Control and Prevention, Kaiser Permanente. The ACE Study Survey Data [Unpublished Data]. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2016.
- Felitti et al. “Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experience (ACE) Study.” *Am J Prev Med.* 1998; 14(4).
- Fortson, B. L., Klevens, J., Merrick, M. T., Gilbert, L. K., & Alexander, S. P. (2016). Preventing child abuse and neglect: A technical package for policy, norm, and programmatic activities. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- SAMHSA’s Trauma and Justice Strategic Initiative. “SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach.” July 2014. Accessed via: <https://store.samhsa.gov/system/files/sma14-4884.pdf>