

The Impact of Adverse Childhood Experiences on Health

Level 5 | 2026

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Pronouns: She, her, hers

www.DiabetesEd.net

Land Acknowledgment

- ▶ We acknowledge and are mindful that Diabetes Education Services stands on lands that were originally occupied by the first people of this area, the Mechoopda, and we recognize their distinctive spiritual relationship with this land, the flora, the fauna, and the waters that run through this area.

We are Here to Help!



Bryanna Sabourin
Director of Operations

If you have questions, you can chat with us at www.DiabetesEd.net
or call 530 / 893-8635 or email at info@diabetesed.net

Diabetes Education Services Inclusion Statement

Based on the IDEA Initiative inspired by CDR

- ▶ Inclusion
- ▶ Diversity
- ▶ Equity
- ▶ Access



- ▶ We are committed to promoting diversity and inclusion in our educational offerings.
- ▶ We recognize, respect, and include differences in ability, age, culture, ethnicity, gender, gender identity, sexual orientation, size, and socioeconomic characteristics.
- ▶ Our goal is to promote equity and access, acknowledging historical and institutional inequities.
- ▶ We are committed to practicing cultural humility and cultivating our cultural competence.
- ▶ We wish to create a safe space within our community where one's beliefs, experiences, identity, and differences in ability, age, size, socio-cultural/socioeconomic characteristics, and political affiliations are considered and respected.

Coach Bev has no Conflict of Interest

- ▶ She's not on any speaker's bureau
- ▶ Does not invest or have any financial relationships with diabetes related companies.
- ▶ Gathers information from reading package inserts, research and articles
- ▶ The ADA Standards of Medical Care is main resource for course content

Objectives:

- ▶ Discuss the benefits of assessing Adverse Childhood Experiences (ACE) in individuals with diabetes.
- ▶ State the relationship between ACE Scores and risk of future health complications.
- ▶ Describe a person-centered approach to fostering resilience and self-care for individuals with toxic stress.
- ▶ Identify two strategies to provide trauma informed care in your work setting.

Diabetes is Complex

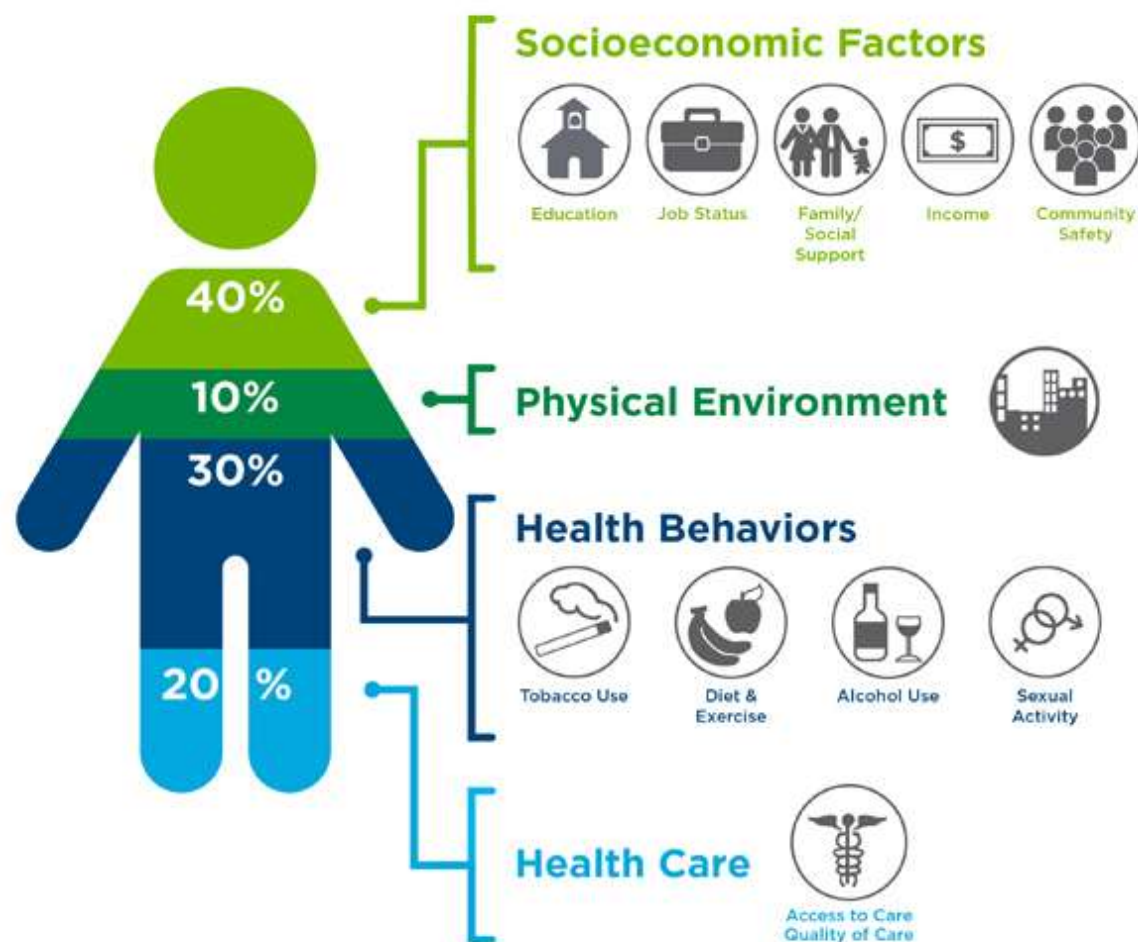
- ▶ Goal – achieve well being and satisfactory medical outcomes
- ▶ Psychological factors:
 - ▶ Environmental
 - ▶ Social
 - ▶ Behavioral
 - ▶ Emotional
- ▶ Keep it person centered while integrating care into daily life
 - ▶ Consider the individual



Address Barriers to Self Management

- **Barriers exist** within health system, payer, health care professional & individual.
- **Address barriers** through innovation, including community health workers, telehealth, other digital health solutions.
- **Consider social determinants of health** in the target population when designing care.

What Goes Into Your Health?



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

<https://coveragetoolkit.org/health-equity/defining-health-equity/>

Tailoring Treatment for Social Context

- ▶ “Social Drivers of Health (SDOH)—
often out of direct control of the individual and potentially
representing lifelong risk—
contribute to health care and
psychosocial outcomes and must
be addressed to improve all health
outcomes”



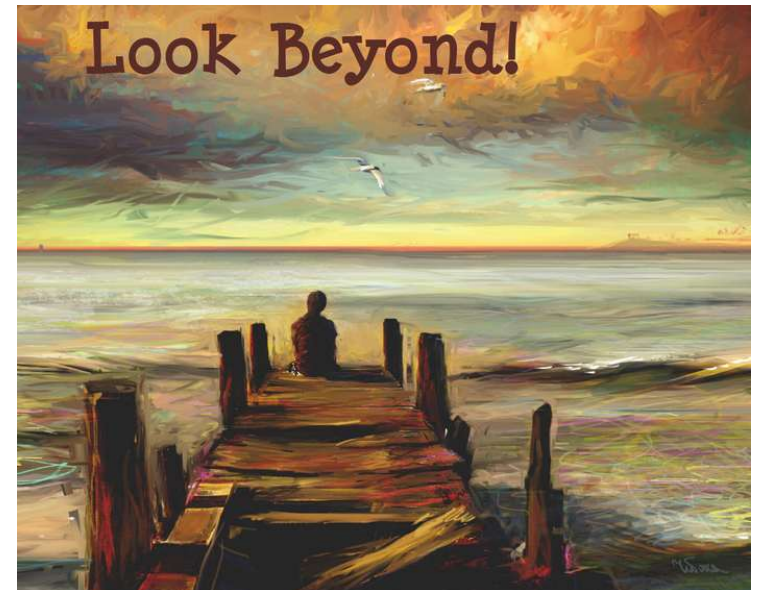
Individualized Care Strategies

- ▶ Consider individualized care and create environmental structures to support people with:
 - ▶ Food insecurity
 - ▶ Cognitive dysfunction
 - ▶ Mental illness (2-3 x's higher rates of diabetes in schizophrenia, bipolar)
 - ▶ HIV (meds can cause pancreatic dysfunction)
 - ▶ History of trauma
- ▶ Health disparities related to:
 - ▶ Ethnicity, racism, culture, sex, socioeconomic status, LGBTQ



Look Beyond Diabetes

- ▶ ACE – Adverse Childhood Experiences
- ▶ Diabetes Distress
- ▶ Cultural traditions, family system.
- ▶ Social, religious and employment influences
- ▶ Personal factors: attitudes, cognitive factors, literacy, learning styles, health beliefs
- ▶ Depression, anxiety
- ▶ Mental illness
- ▶ Addiction issues



Poll Question 1

JR is 26 years old with newly diagnosed diabetes. JR keeps missing appointments and when you finally get a hold of them on the phone, they start crying and say “my life is a mess”. JR is struggling with addiction, being unhoused and weight struggles in addition to diabetes. Based on this information, what is the most likely barrier to JR engaging in self-care?

JR is
struggling
with
depression

Diabetes
distress is
at the core
of the listed
behaviors

Grieving
and denial
of diabetes
diagnosis

Adverse
Childhood
experiences
(ACEs)

Question - What is ACE?

- ▶ ACE =
 - ▶ Adverse
 - ▶ Childhood
 - ▶ Experiences
 - ▶ (before 18 yrs)
- ▶ What is the relationship between childhood trauma and health?



CDC-Kaiser Study 1997

- ▶ Mailed out over 17,000 questionnaires asking KP participants in CA, asking about specific early childhood adverse experiences.
- ▶ More than 60% had 1 or more
- ▶ 18% had 4 or more



10 Assessment Areas for ACE – Use 10 Question Screening Tool to Assess

Abuse



Physical



Emotional



Sexual

Neglect



Physical



Emotional

Household Challenges



Mental
Illness



Intimate
Partner
Violence



Parental
Separation
or Divorce



Incarceration



Substance
Misuse or
Dependence

Adverse Childhood Experience Questionnaire for Adults

California Surgeon General's Clinical Advisory Committee

Our relationships and experiences—even those in childhood—can affect our health and well-being. Difficult childhood experiences are very common. Please tell us whether you have had any of the experiences listed below, as they may be affecting your health today or may affect your health in the future. This information will help you and your provider better understand how to work together to support your health and well-being.

Instructions: Below is a list of 10 categories of Adverse Childhood Experiences (ACEs). From the list below, please add up the number of categories of ACEs you experienced prior to your 18th birthday and put the total number at the bottom. (You do not need to indicate which categories apply to you, only the total number of categories that apply.)

Did you feel that you didn't have enough to eat, had to wear dirty clothes, or had no one to protect or take care of you?

Did you lose a parent through divorce, abandonment, death, or other reason?

Did you live with anyone who was depressed, mentally ill, or attempted suicide?

Did you live with anyone who had a problem with drinking or using drugs, including prescription drugs?

Did your parents or adults in your home ever hit, punch, beat, or threaten to harm each other?

Did you live with anyone who went to jail or prison?

Did a parent or adult in your home ever swear at you, insult you, or put you down?

Did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?

Did you feel that no one in your family loved you or thought you were special?

Did you experience unwanted sexual contact (such as fondling or oral/anal/vaginal intercourse/penetration)?

Your ACE score is the total number of yes responses.

Do you believe that these experiences have affected your health?



Not Much



Some



A Lot

Experiences in childhood are just one part of a person's life story.

There are many ways to heal throughout one's life.

Adult ACE Questionnaire

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

<https://aceresourcenetwork.com/>

<https://www.cdc.gov/violenceprevention/aces/about.html>

<https://numberstory.org/>



A Note to My Colleagues

- ▶ Many of us have experienced childhood trauma
- ▶ This information may evoke strong feelings or difficult memories
- ▶ You may want to share your story or maybe you're not ready.
- ▶ We will discuss coping and healing strategies.
- ▶ Counseling can help



Wait, What About Diabetes Distress?



Adverse Childhood Experience (ACE) is Common

About **1 in 7** children experienced child abuse and neglect in the last year.



Estimated Cost of Child Abuse and Neglect



*total lifetime economic burden of child abuse and neglect in 2015

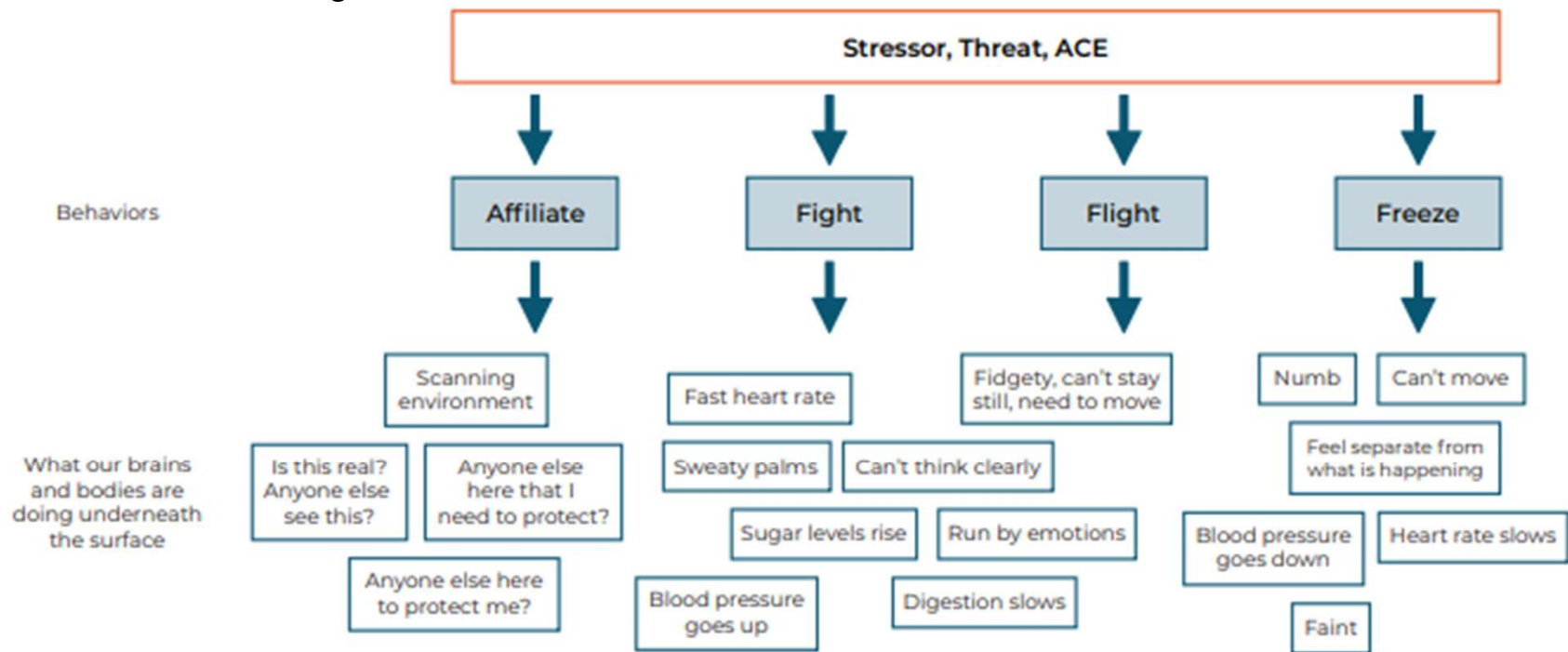
See [Child Abuse and Neglect Resources](#) for more resources about child abuse and neglect.

Stress Response System

Our biological stress response system

When we experience an event as threatening, our stress response is activated. There are four main behavioral stress responses: 1) affiliate, 2) fight, 3) flight, and 4) freeze. Following is what happens in our bodies for each type of response.³²⁻³⁵

www.acesaware.org

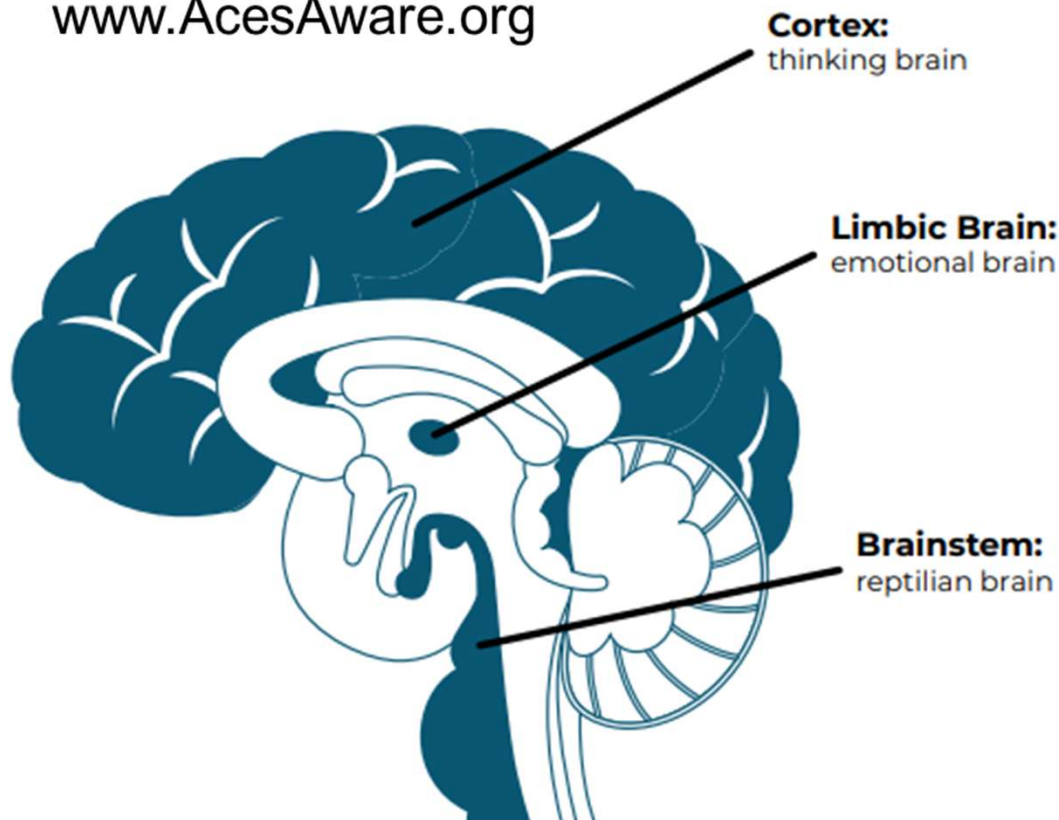


*What is happening in the body when we have a stress response.*³³⁻³⁵

STRESS BUSTERS TOOLKIT
for Community-Based Organizations

Brain's Response to Stressors

www.AcesAware.org



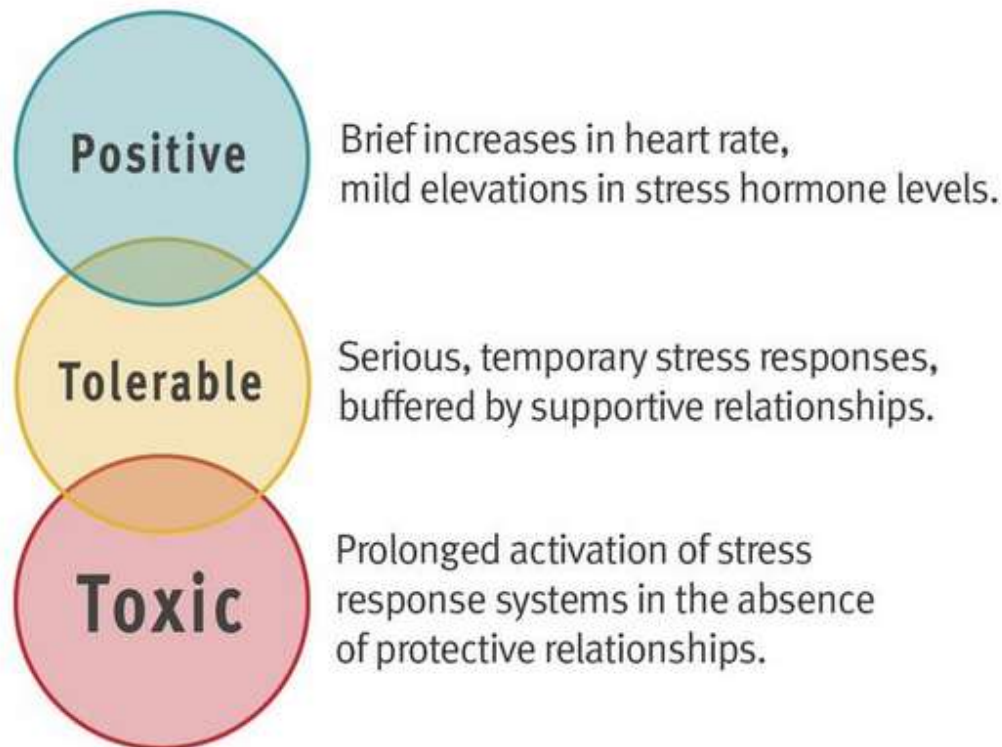
Cortex “thinking brain” - In an emergency we don’t want to waste time planning – we want our instincts and emotions to take over. When there is a threat, this part of the “thinking brain” may essentially turn off.

Brain Stem “lizard brain” - Survival State “Am I safe”. Controls automatic functions; heart rate, breathing, blood flow, and temperature. Involved in instinctual processes to keep us safe and is critical for the fight, flight, and freeze responses.

Limbic brain “mammalian brain” - includes the amygdala, also known as the “threat detector” – is like an emotional processing center. When we detect danger, it directs the rest of the brain to do what has to be done instinctually to keep us motivated and safe.

Toxic Stress (ACEs) in Childhood

Three Types of Stress



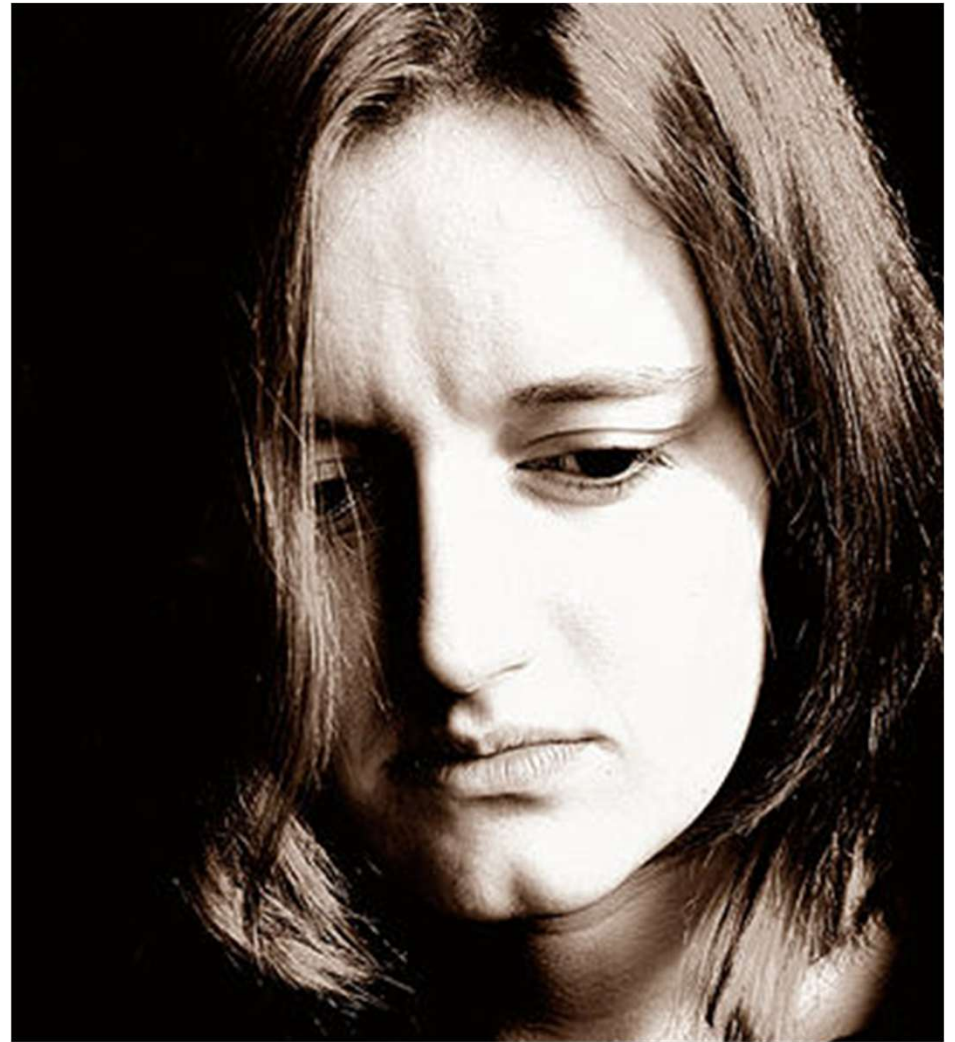
► As Adults

- Manifests as psychological issues (depression and anxiety)
- But also manifests as diseases like diabetes (regardless of lifestyle factors)

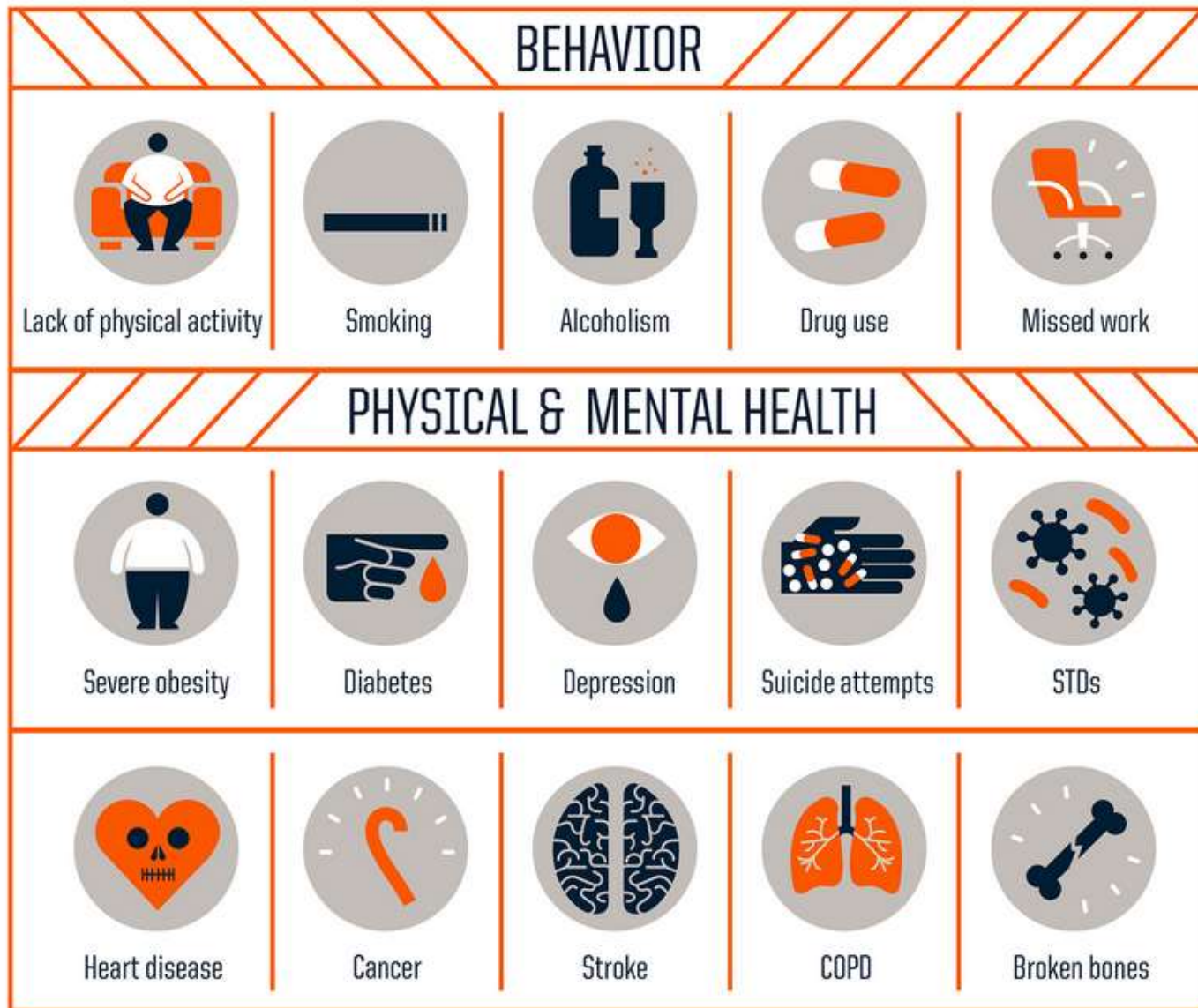
Toxic stress is preventable and treatable

The impact of childhood trauma and Toxic Stress?

- ▶ Leads to:
 - ▶ Neuroendocrine dysregulation
 - ▶ Altered immune response
 - ▶ Disrupts DNA packaging
 - ▶ Epigenetic tags can alter genetic makeup



Impact of Childhood Trauma on Adults



ACE increases risk for 9 out of 10 leading causes of death in US

Leading Cause of Death

Odds Ratio with ≥ 4 ACEs

▶ Heart Disease	▶ 2.1
▶ Stroke	▶ 2.0
▶ Diabetes	▶ 1.4
▶ Kidney Disease	▶ 1.7
▶ Cancer	▶ 2.3
▶ Alzheimer's	▶ 4.2
▶ Suicide(attempts)	▶ 37.5

It's Worth Preventing ACEs

Early Release / Vol. 68

Morbidity and Mortality Weekly Report

November 5, 2019

Preventing ACEs could reduce a large number of health conditions.



UP TO

21 MILLION

CASES OF
DEPRESSION



UP TO

1.9 MILLION

CASES OF
HEART DISEASE



UP TO

2.5 MILLION

CASES OF
OVERWEIGHT/OBESITY

Pediatric ACEs and Related Life-events – PEARLS for Peds

Pediatric ACEs and Related Life Events Screener

CHILD

Many families experience stressful life events. Over time these experiences can affect your child's health and wellbeing. We would like to ask you questions about your child so we can help them be as healthy as possible.

The Pediatric ACEs and Related Life-events Screener (PEARLS) is used to screen children and adolescents ages 0-19 for ACEs

PEARLS in English

- Child (Parent-Caregiver Report) – De-Identified (English)
- Child (Parent-Caregiver Report) – Identified (English)
- Child (Parent-Caregiver Report) – Part 1 De-Identified, Part 2 Identified (English)
- Teen (Parent-Caregiver Report) – De-Identified (English)
- Teen (Parent-Caregiver Report) – Identified (English)
- Teen (Parent-Caregiver Report) – Part 1 De-Identified, Part 2 Identified (English)
- Teen (Self-Report) – De-Identified (English)
- Teen (Self-Report) – Identified (English)
- Teen (Self-Report) – Part 1 De-Identified, Part 2 Identified (English)

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)

PEARLS Part 1 – Directed to Caregiver

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

PEARLS Part 2

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:

The Act of Recognition is Healing



~ Coach Beverly

**When we provide
trauma informed
care, we give voice
to the unheard.**

**There is hope for
healing.**

**We are part of
breaking the cycle.**

Awareness >> to Healing

Yet many people, parents, health professionals, and educators don't know about ACEs. This lack of knowledge leads to significant illness and unimaginable expense – much of which could be averted through awareness, education, and action.



<https://aceresourcenetwork.com/>
You can heal from ACEs.

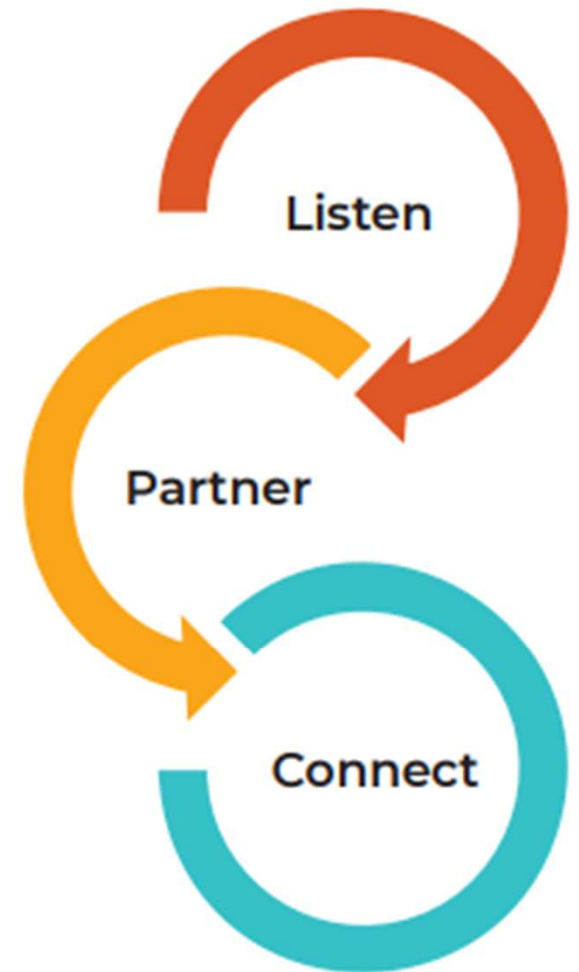
ACEs have affected all of us in one way or another. ACEs are what happened to us. They are not who we are. They are part of our story and they shape it. If our well-being has been affected, change is possible and there is hope.

What can Healthcare Professionals do?

Listen, Partner, Connect Framework

How can you more consistently use a trauma-informed approach in client interactions? The Listen, Partner, Connect Framework provides a trauma-informed, strengths-based, and collaborative approach to connecting with clients and is intended to be an intuitive way to remember how to structure client interactions.

Listen	Ask open-ended questions about Stress Busters and actively listen to clients.
Partner	Use strengths-based and collaborative approaches with the client, such as motivational interviewing to address what matters most to them and builds on their strengths.
Connect	Refer clients to resources that they want within your organization or in the community, increasing access to resources that can help address clients' needs and calm the stress response.



www.AcesAware.org Stress Busters Toolkit and other training programs.

6 Principles of Trauma Informed Approach

A trauma-informed approach helps us be nonjudgmental and focus on client strengths to motivate and support. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides the following key principles of a trauma-informed approach, which offer useful guidance on providing care and services.¹

Six Principles of a TIA

1	Safety	Safety in physical settings and interpersonal interactions
2	Trustworthiness and Transparency	Operations are conducted and decisions are made with transparency, consistency, respect, and fairness so as to build and maintain trust
3	Peer Support	Support from those with lived experiences of trauma or, in case of children with history of trauma, their family members
4	Collaboration and Mutuality	Partnering, leveling of power differences between and among staff and clients
5	Empowerment	Individuals' strengths and experiences are recognized and built upon
6	Cultural, Historical, and Gender Issues	Organization moves beyond the cultural stereotypes and biases

The clinical response to identification of toxic stress should include:

1. Applying principles of trauma-informed care, including establishing trust, safety, and collaborative decision-making.
2. Supplementing usual care for ACE-Associated Health Conditions with patient education on toxic stress and discussing strategies that can help regulate the stress response, including:

- Supportive relationships, including with caregivers (for children), other family members, and peers
- High-quality, sufficient sleep
- Balanced nutrition
- Regular physical activity
- Mindfulness and meditation
- Experiencing nature
- Mental health care, including psychotherapy or psychiatric care, and substance use disorder treatment, when indicated



3. Validating existing strengths and protective factors.

4. Referrals to patient resources or interventions, such as educational materials, social workers, school agencies, care coordination or patient navigation, and community health workers.

www.AcesAware.org Stress Busters Toolkit and other training programs

Toolkit: Stress Busters for Community-Based Organizations

Get the information, skills, and resources to help clients prevent and heal toxic stress. Ahora disponible en español.

GO TO TOOLKIT

Now
available in
Spanish.

www.AcesAware.org

Stress Busters Toolkit and other training resources.



Please visit ACEsAware.org for Free Training & Resources



Resources By Type

The ACE resources below are organized by type to help you find the right resource more quickly. Select a type to see a list and descriptions of corresponding resources.

Visit [Advanced Search](#) to filter the resources and search by keyword.

Resources by Type
Resources by Topic
Resources by Stage
Advanced Search
Resources in Spanish
Frequently Asked Operational Questions

Clinical Resources for Adult Providers	Clinical Resources for Pediatric Providers	Patient/Family Education Handouts
Organizational Toolkits	Policy, Research and Advocacy Briefs	Grantee Publications

Filter by

All



Poll Question 2

JR is a 22-year-old living with type 1 diabetes who arrives late for their appointment and seems out of sorts. When looking at the ambulatory glucose profile, you notice that time in range is less than 40% and coefficient of variation is also over 40%. You remember from a previous visit that JR had experienced almost half a dozen adverse childhood experiences and had elevated diabetes distress. Based on this information, what is the next best step?

- A. Use the empowerment approach to help JR take charge of their life.
- B. Request that JR is referred to a mental health specialist.
- C. Utilize motivational interviewing techniques to help JR through this rough spot.
- D. Create a judgement free zone and explore with JR how they are feeling.

Create a Judgement Free Zone – Roll out the Carpet of Acceptance

There are no bad or good blood glucose numbers.

There is no such thing as cheating.
You are not failing at your diabetes.
It is not your fault you have diabetes.
Thank you for showing up today.



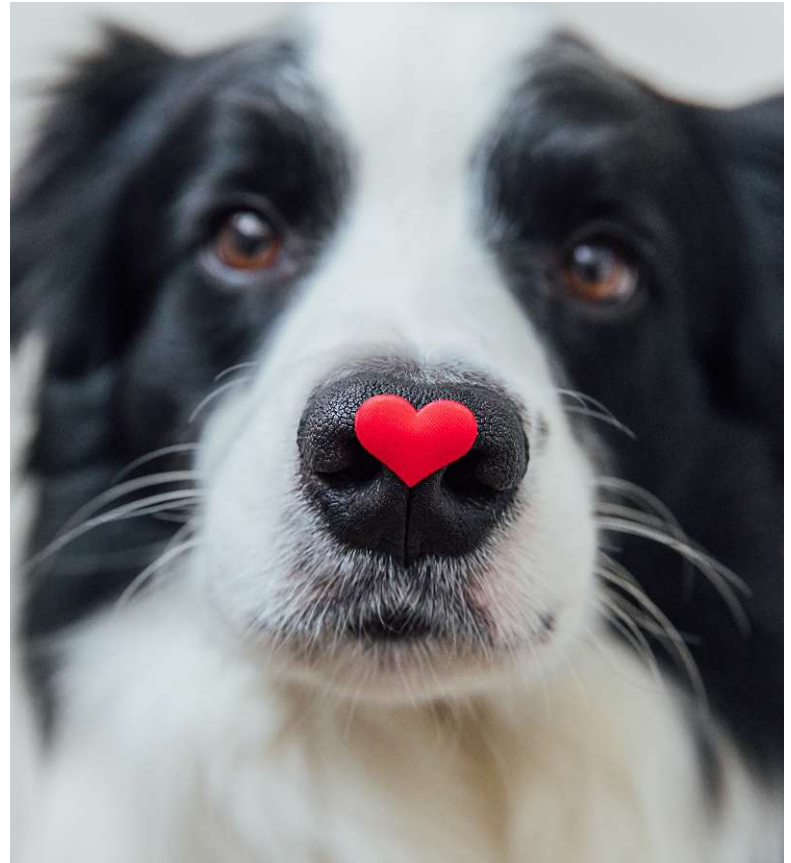


Missed Appointments due to Stigma and Shame

A recent survey of over 2,600 people with diabetes across eight countries revealed that nearly 40% of missed doctor's appointments are due to stigma or shame.

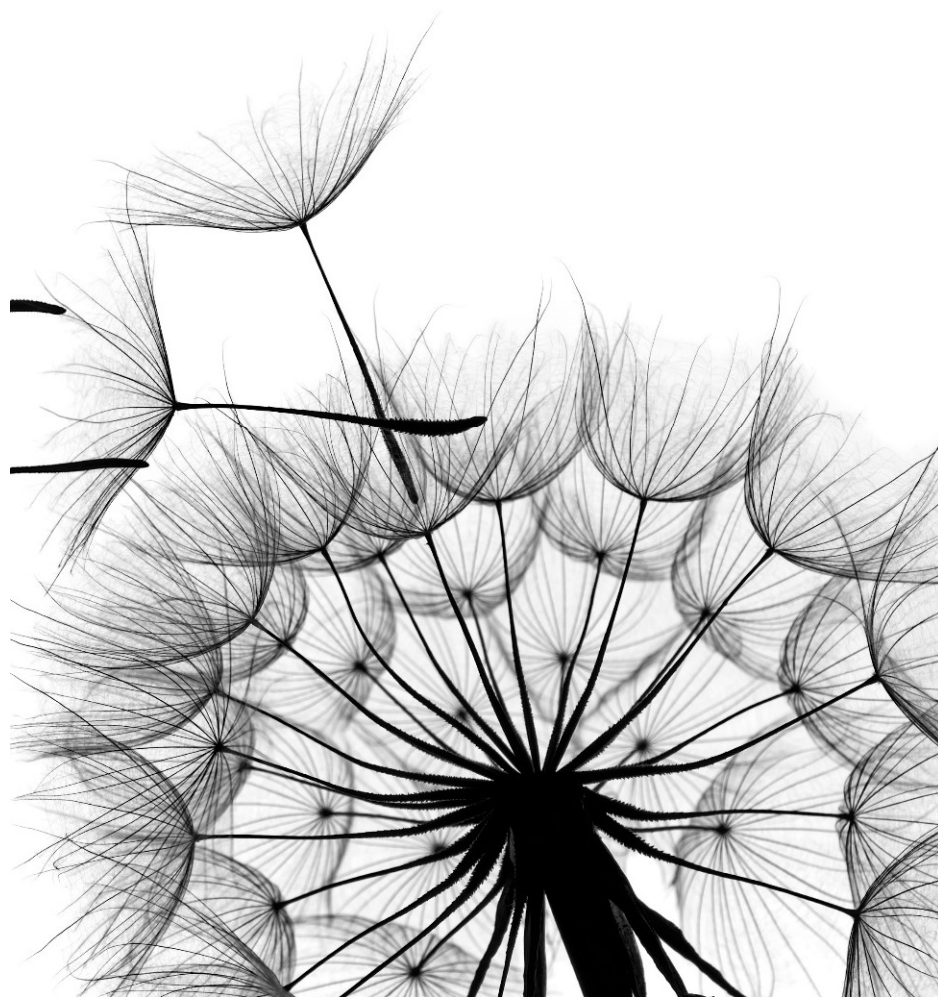
Embark Trial – Emotions as Priority

- ▶ **I have finally given myself permission to make addressing the emotional aspects of diabetes a priority.**
- ▶ **~Coach Beverly**



Releasing the Diabetes Distress Brake

- ▶ This strategy recognizes that diabetes distress acts as a brake on the application of existing diabetes knowledge and skills.
- ▶ By releasing the diabetes distress brake through emotion-focused intervention, the negative cycle can be efficiently ended.



Commit to Listening at least Half of the Time



ACEs Aware Self-Care Tool for Adults

**Print and fill in or
Type in the Goals**

When a person has experienced significant Adverse Childhood Experiences (ACEs), their body may make more or less stress hormones than is healthy. This can lead to physical and/or mental health problems, such as diabetes, heart disease, anxiety, smoking, or unhealthy use of alcohol or other drugs. Safe, stable, and nurturing relationships can protect our brains and bodies from the harmful effects of stress and adversity. The following tips can help you manage your stress response. Healthy nutrition, regular exercise, restful sleep, practicing mindfulness, building social connections, and getting mental health support can help decrease stress hormones and improve health. Here are some goals you can set to support your health. *[Check the goals that you are choosing for yourself!]*

☐ **Healthy relationships.** I've set a goal of...

- ☐ Spending more high-quality time together with loved ones, such as:
 - ☐ Having regular meals together
 - ☐ Having regular “no electronics” time for us to talk and connect with each other
- ☐ Making time to see friends and create a healthy support system for myself
- ☐ Connecting regularly with members of my community to build social connections
- ☐ Asking for help if I feel physically or emotionally unsafe in my relationships
 - ☐ 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.** I've set a goal of...

- ☐ Limiting screen time to less than ___ hours per day
- ☐ Walking at least 30 minutes every day
- ☐ Finding a type of exercise that I enjoy and doing it regularly
- ☐ Create your own goal: _____

Mental Health Goals

☐ **Mental health.** I've set a goal of...

- ☐ Learning more about mental health and/or substance use services (e.g., counseling, groups, medications,)
- ☐ Identifying a local mental health professional or support group.
- ☐ Scheduling an appointment with a mental health professional
- ☐ If I am feeling like I am in crisis, I will get help
 - ☐ The National Suicide Prevention Lifeline is **800-273-TALK (8255)**
 - ☐ To reach a crisis text line, **text HOME to 741-741**
- ☐ Create your own goal: _____

Here are some other goals that you can set to help yourself be healthier.

☐ **Self-Care.** I've set a goal of...

2

www.ACEsAware.org



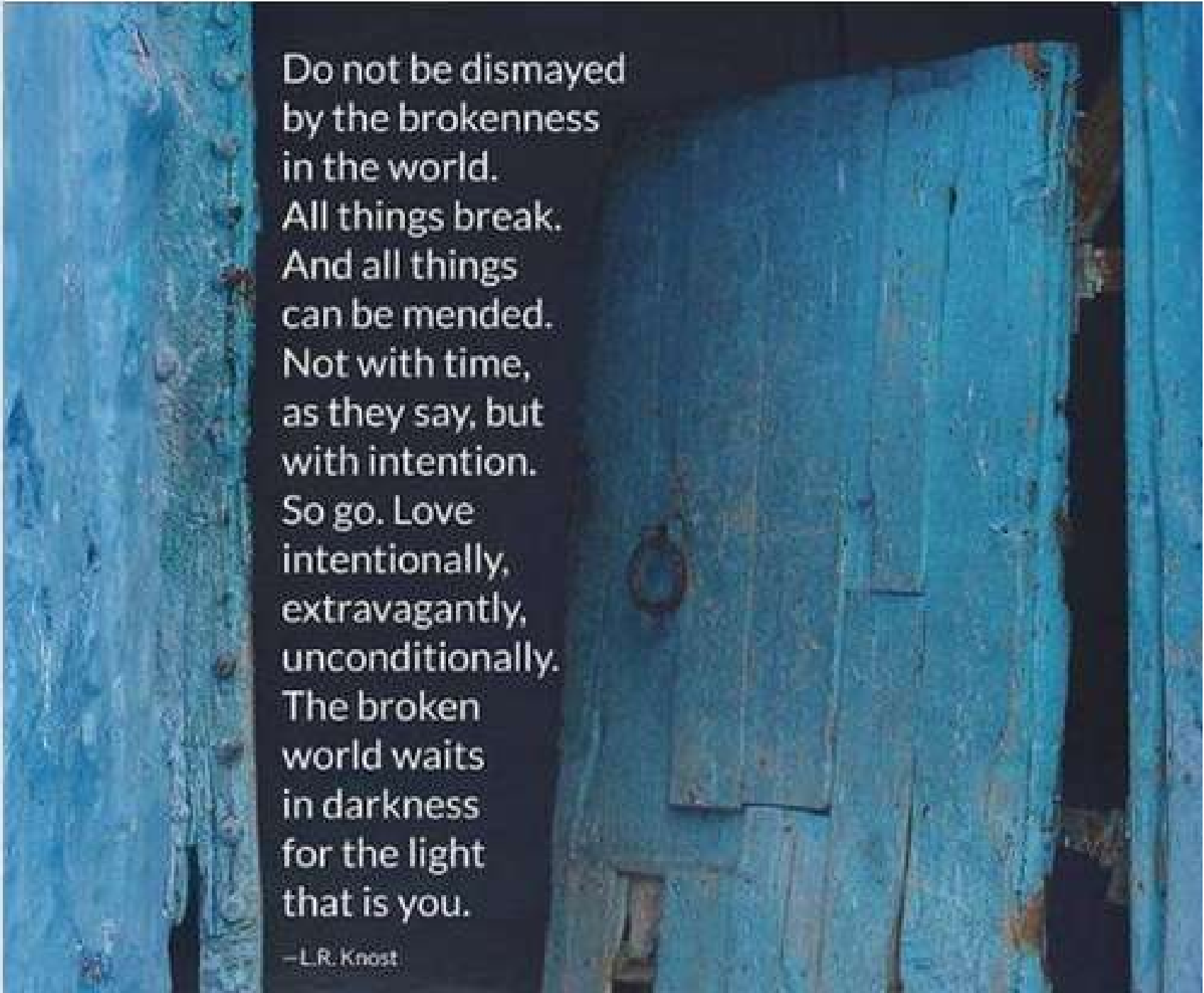
- ☐ Limiting screen/social media time to less than ___ hours per day
- ☐ Making a plan for what to do when I'm feeling stressed out, angry, or overwhelmed
- ☐ Planning with my partner, friends, or family to get support when I need it
- ☐ Making regular appointments with my medical provider(s), including for preventive care
- ☐ Identifying my strengths and learning more about building resilience
- ☐ Create your own goal: _____

For more information, please visit:

From **ACEs Aware**: <https://www.acesaware.org/heal/resources/>

Mental Health and Substance Use:

- **The National Alliance on Mental Illness (NAMI):** <https://www.nami.org/help>
 - 1-800-950-NAMI (6264); **Crisis Text Line – Text HOME to 741-741**
- **The Substance Abuse and Mental Health Services Administration Facilities Locator:** <https://findtreatment.samhsa.gov/locator>

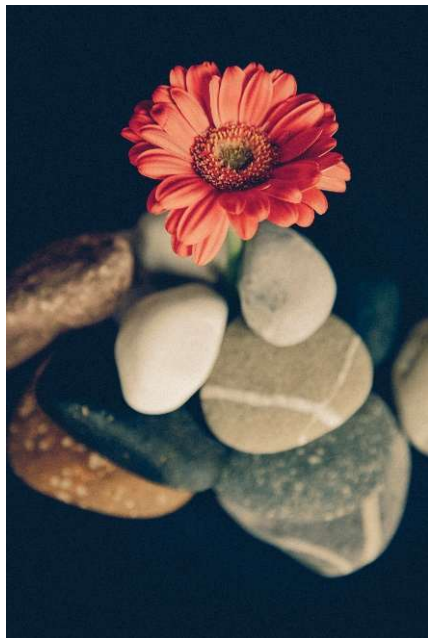


Do not be dismayed
by the brokenness
in the world.
All things break.
And all things
can be mended.
Not with time,
as they say, but
with intention.
So go. Love
intentionally,
extravagantly,
unconditionally.
The broken
world waits
in darkness
for the light
that is you.

— L.R. Knost

ACEs are Not Destiny

Diabetes Care
Specialists can help
interrupt
intergenerational
transmission of toxic
stress



- ▶ ‘With early detection and evidence-based intervention, we can transform health outcomes’

Nadine Burke Harris, MD
1st Surgeon General of
California
Pediatrician, Activist, Role
Model

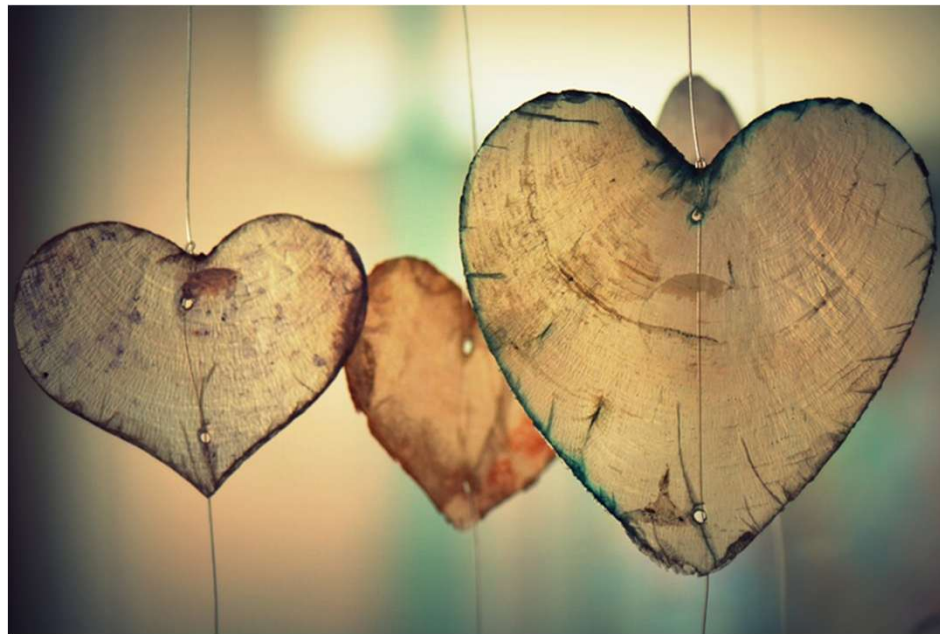
Supporting Resilience



Actions We Can Encourage That Help Buffer Toxic Stress Response



Being Trauma Aware Saves Lives



I finally feel like someone actually cares what happened to me and is providing me with help and support!

Thank You



- ▶ Questions? We are here to help!
- ▶ Email info@diabetesed.net
- ▶ Call 530/ 893-8635
- ▶ www.diabetesed.net

Breath Break

