



**Trauma-Informed Care and Oral Health:
*Recommendations for Practitioners***

**The Illinois
ACEs Response
Collaborative**

Health & Medicine
POLICY RESEARCH GROUP

Introduction

Childhood experiences, both positive and negative, can have a significant impact on the health of individuals across the lifespan. Understanding the role of childhood adversity and trauma—including experiences of abuse and neglect—on outcomes allows practitioners to implement prevention and treatment strategies that enhance the provision of oral health care. These recommendations were created to provide a background on childhood adversity and trauma; outline their connection to oral health outcomes; and describe methods that dentists and other oral health

professionals can embed in their practice, teaching, and research to promote health in all domains: physical, mental, and social-emotional. This information can serve as the first step in assisting dentists in promoting trauma-informed and trauma-responsive care throughout their practices and in the oral health community at large.

What are Adverse Childhood Experiences, and what is the ACE Study?

The landmark Adverse Childhood Experiences (ACE) Study investigated the long-term effects of ACEs on physical, mental, and social-emotional wellbeing. Conducted by Kaiser Permanente and the Centers for Disease Control and Prevention (CDC), researchers surveyed more than 17,000 patients on ten ACEs occurring before age 18 spanning three domains (Figure 1), as well as an array of physical, mental, and social health issues from patients' adolescence to adulthood. Individuals were given a score of one to ten based on the number of adverse experiences they reported in childhood.

The ACE Study made three notable discoveries (Figure 2). First, researchers found that ACEs were common—64% of those surveyed reported at least one or more ACE. Second, researchers found that the more ACEs a person reported, the higher the likelihood he or she would experience a wide range of more than 40 adverse physical, mental, and social-emotional health outcomes in adulthood including heart disease, diabetes, autoimmune diseases, depression, substance use disorders, and suicide. Third, individuals with six or more ACEs were at risk for living 20 years less, on average, than those with zero ACEs.ⁱ

Figure 1

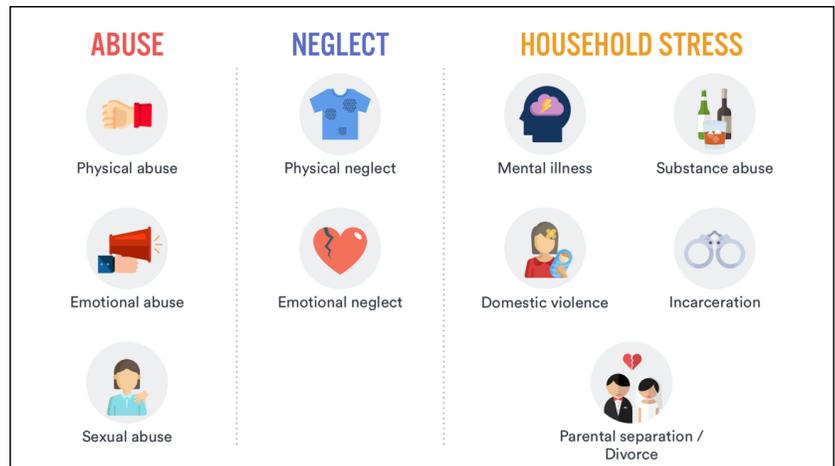
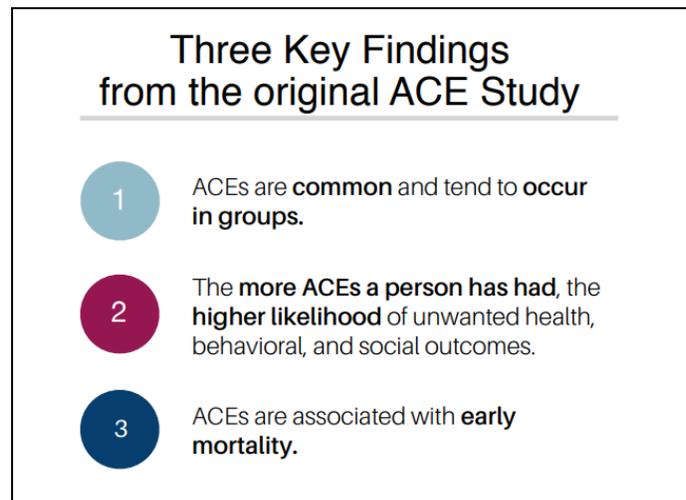


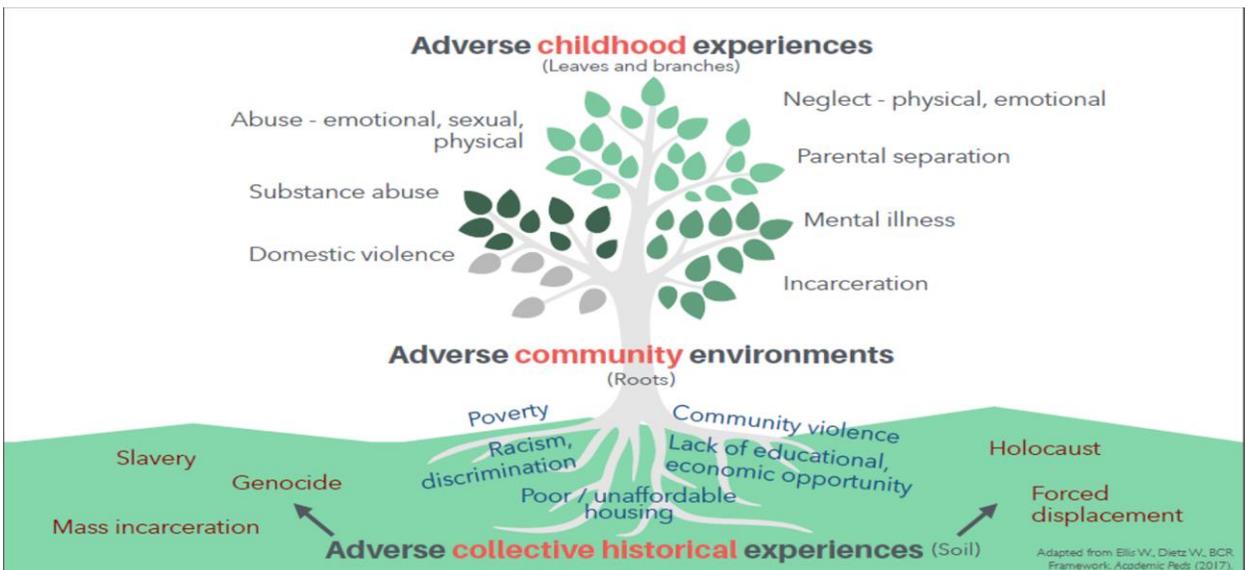
Figure 2



Beyond the Original Ten: Expanding the concept of ACEs

The ACE Study revolutionized the way researchers thought about the impact of childhood adversity on physical, mental, and social-emotional health and well-being and gave new insight into how childhood experiences influence lifelong wellness. People, however, do not exist in a vacuum. Since the completion of the study in 1997, research has demonstrated that collective community, structural, and historical experiences can also affect individual health. Public health studies have shown that larger social issues, such as racism, xenophobia, and poverty, can influence health just as much as the traumas patients face at home.ⁱⁱ While ACEs and individual trauma are a key element in determining health outcomes, it is also important for practitioners to take note of the historical and current macro level issues that might affect the communities they serve (Figure 3).

Figure 3



Adapted by Stan Sonu, MD from Ellis, W., Dietz, W. (2017) *A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience Model*.

ACEs, Trauma, and Oral Health

Just as the original ACE Study found a correlation between exposure to childhood adversity and poor health and social-emotional outcomes, subsequent studies have found a similar correlation with oral health outcomes. One study found that those who had an ACE score of four or higher were less likely to receive adequate dental care as a childⁱⁱⁱ, and another found that children who reported ACEs were more likely to have poor oral health and significant tooth decay, higher incidence of gum disease, or fungal or viral infections of the mouth. Additionally, having multiple experiences of childhood adversity had a cumulative effect on oral health, meaning those who had more adverse experiences were both more likely to have poor dental health and more individual caries^{iv} (Chart 1).

Trauma and Toxic Stress

Stress is a normal part of childhood development and life in general. People feel varying levels of stress every day, whether it is because of relatively minor incidents like a long commute or a trip to the dentist, or because of larger life events like the loss of a job or death of a family member. Accordingly, the mind and body react to stress, resulting in the release of hormones like cortisol and epinephrine. This can lead to an increased heart rate and blood pressure as well as other physiologic changes. When a child's stress response is activated in a

Chart 1 - Other oral health conditions associated with a history of trauma and adversity include:

- Endocrine changes: Alterations in the concentration of adrenal corticoids alter the response of oral tissues to bacterial toxins and other hormones involved in the general adaptation syndrome.
- Neglect of oral hygiene
- Gingival circulation: Autonomic Nervous System increasing vasoconstriction of blood vessels decreasing O₂ and nutrient supply to tissues
- Alteration in salivary flow and components: Increase and decrease in salivary flow; Altered chemical composition – IgA
- Lowered host resistance
- Bruxism
- Acute Necrotizing Ulcerative Gingivitis (ANUG)
- Aggressive Periodontitis
- Systemic inflammatory diseases
- Poor wound healing
- Traumatic injury to head, neck, and mouth^{vi}

supportive environment with caring adults, these physiologic responses are buffered and brain and body are able to return to baseline. These experiences of stress are healthy because they are opportunities for development. They help to build a flexible stress response system that can react appropriately to diverse situations.

Toxic stress can occur, however, when a child experiences prolonged, severe, and/or frequent adversity, particularly at sensitive or critical periods of development and without sufficient buffers (Figure 4). This can include physical or sexual abuse, neglect, exposure to violence, or other traumatic experiences like discrimination and war. When physiologic symptoms of stress, such as the release of cortisol and epinephrine, or increased blood pressure, continue for prolonged periods, it becomes increasingly difficult for the body to return to its baseline. Toxic stress can lead to disruptions in brain development and function, which in turn can lead to damage to the immune system, persistent systemic inflammation, and chronic physical, emotional and social problems.¹

Resilience

Figure 4

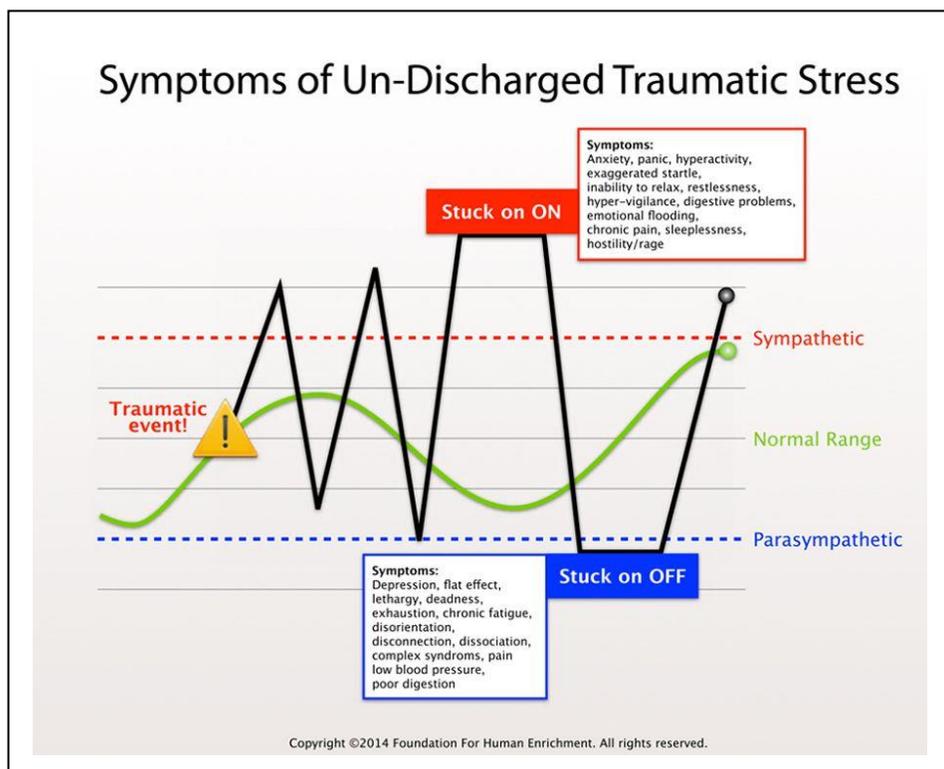


Figure 5

Resilience is a key part of preventing and treating the health effects of ACEs and trauma. Put simply, resilience is the ability to cope with and recover from stressful events. Being resilient does not mean that a person never experiences stress or difficult situations, nor is resilience something you either do or do not possess. Rather, resilience is the thoughts, actions and behaviors that help us bounce back from stressful situations and can be developed and nurtured in anyone. Children who grow up with caring adults in their lives learn the skills they will need to cultivate and maintain resilience through those relationships. Those who have experienced adversity or trauma in their past may find it more difficult to develop these skills, but practitioners can help foster resilience by providing a safe and supportive environment for their patients and by practicing trauma-informed care.

What Can Oral Health Providers Do?

Trauma-Informed Care

Dentists and other oral health professionals can improve the experience of care for their patients by adopting a trauma-informed approach. Trauma-informed care is a system of organizations, programs, and services intended to promote healing and reduce the risk of re-traumatization of patients and staff, which is significant in clinical settings that can replicate the dynamics of loss of power, control, or safety inherent in a traumatic experience.^v While trauma-informed care may include specific practices, it is most importantly an overarching philosophy that guides staff in their interactions with patients and each other.

The Substance Abuse and Mental Health Services Administration (SAMHSA) lists four key elements to facilitate the transformation from traditional practice into a trauma-informed organization or practice:

- **Realize** the impact of trauma.
- **Recognize** signs and symptoms of trauma in patients, families, and staff within the organization.
- **Respond** by integrating knowledge about trauma into policies, procedures, and practices.
- **Resist** re-traumatizing patients and staff.^{vi}

Trauma-Informed care does not mean that you have to ask your patients sensitive or uncomfortable questions. Nor does it mean that a dentist has to take on the duties of a social worker or psychologist. Rather, trauma-informed care is a framework to help you make the work you are already doing its most impactful. Because almost two thirds of adults across the nation and 40% of children have been exposed to some adversity or trauma, working with all patients to

Universal Trauma Precautions

BEHAVIORAL STRATEGIES

- Ask your patient whether there is anything you can do to make them more comfortable.
- If the patient seems worried or anxious about a specific procedure, ask them to think about what has helped with a stressful situation in the past.
- Use the tell-show-do technique during the appointment to let the patient know what you are going to advance—give them an overview of the entire appointment as well as specific procedures.
- Let the patient know that he or she can raise a hand (or use another signal) and you will stop the procedure, if it is medically safe to do so

SAMPLE COMMUNICATION STRATEGIES

- “What can I do to make you more comfortable during the procedure or examination today?”
- “Before we proceed, is there anything else you think I should know?”
- “Just to let you know, this is generally how this type of appointment runs. First, I will get a history, then we will take a look in your mouth, and then we will take x-rays. I’ll come back to talk and answer questions.”
- “So you know what to expect, what we would normally do for this type of appointment is first discuss your history. Next, I will look in your mouth and, if necessary, we’ll take x-rays. Please feel free to ask me any questions along the way, or get my attention by raising your hand if you need a break.”
- “I am going to do a percussion test on your tooth. To do this, I will gently tap your teeth. Let me show you on my hand, or we can use yours. It will feel like this [tap on hand]. Let’s try it on your tooth.”

help them feel comfortable, safe, and connected helps create optimal opportunities for recovery and healing. Some methods oral health providers can employ include:

- **Involving patients in the treatment process:** Help patients understand not only the expected outcome of a procedure but the steps involved. Explain the steps you are taking and be open to stopping a procedure when appropriate. Let patients know they can ask questions and have the final say on which procedures they undergo or medications they take, and emphasize the patient’s critical role in their own care. Always use consent-based language such as “Here are the steps to the procedure we’ll be performing, is it alright if I place this instrument in your mouth?” or “My hands are going to be around your mouth and nose, please let me know if you need me to stop or would like to take a break.” (Figure 5)
- **Training staff in trauma-informed treatment approaches:** While the dentist and hygienist may be the only clinicians the patient interacts within the exam room, they are not the only staff members involved in patient care. Receptionists, x-ray techs, billing staff, and students all play an important role, and so it is important to emphasize a trauma-informed lens beyond the exam room. Front desk staff and security guards, for example, can set the tone for a patient’s entire visit within just a few seconds of arrival. Making sure staff on all levels are trained in trauma-informed care is paramount to successful implementation.
- **Embed trauma specific practices in your care:** Consider adding elements in your practice that will reduce anxiety in patients. Many people feel anxious at the dentist’s office, and a history of trauma can heighten that fear. Environmental changes like calming lights and music, bibs with lavender oil, or mindfulness practices like deep breathing can help address these feelings. Discuss with the patient at the beginning of the appointment what might make them most comfortable—this could include things like leaving their coat on during the exam, wearing headphones or sunglasses, or providing a blanket. These steps not only provide means to address anxiety, but enhance the relationship with the patient and provide a sense of agency.

Trauma-Informed care does not mean that you have to ask your patients sensitive or uncomfortable questions. Nor does it mean that a dentist has to take on the duties of a social worker or psychologist. Rather, trauma-informed care is a framework to help you make the work you are already doing its most impactful.

Plan to learn about or hire other practitioners who employ evidence-based modalities for preventing and healing trauma such as hypnotherapy and needleless acupuncture techniques. These modalities help to prevent re-traumatization, create an optimal setting for healing, and reduce acute and chronic pain.^{vi}

Additionally, it is important to remember that staff also have their own life experiences and histories with trauma. Creating an environment that emphasizes staff wellness and self-care, encourages communication and transparency, and provides regular supervision, or check-ins, will enhance not only patient care, but staff satisfaction and retention.

Finally, a trauma-informed approach explores the motivations behind patient behavior that can be harmful to their oral health. For example, if you have a patient whose diet is impacting their oral health, ask yourself, “Why might this patient need to soothe themselves with sugar?” a substance which targets the reward center and might be a substitute for a feeling of safety, love, and belonging. Then you could begin to explore with the patient what else might enhance those essential feelings in order to co-create an optimal healing experience.

- **Engaging referral sources and partner organizations:** It is important for a trauma-informed practice to not only be aware of a patient’s and/or a community’s hardships, but also the resources that are available. Familiarize yourself and your staff with organizational and neighborhood social service and government programs and agencies and utilize them when appropriate. Also, learn from your patients about the issues they are facing, and as a practice, seek out resources that might enhance their oral and overall health. For example, perhaps you notice a number of patients with tooth decay due to diet. Your first instinct might be to simply advise them to cut out processed foods and sugary beverages, but this may be impossible for patients if they do not have a grocery store or food pantry nearby that provides access to healthier options. Having a list of local resources on hand, whether they be for practical or psychosocial needs, is a way to support not only continued commitment to good oral health practices, but also an enhanced relationship with patients and the community.^{vii}

For more information about disclosures of abuse, please visit these organizations:

If you discover a child is being abused, contact the Illinois Department of Children & Family Services child abuse hotline, 1-800-25-ABUSE (1-800-252-2873) right away.

- For pediatric patients who disclose abuse and neglect: [The Chicago Children’s Advocacy Center](#).
- For adult patients who disclose a history of child abuse or neglect: [Stop It! Resources for Adult Survivors](#) or the Rape, Abuse, & Incest National Network (RAINN) hotline at 1-800-656-HOPE (4673)
- For adult patients who disclose domestic violence: The State of Illinois Domestic Violence Hotline at 1-877-863-6338
- For patients who disclose a history of sexual assault: [Resilience](#) (formerly Rape Victim Advocates) or the Rape, Abuse & Incest National Network hotline at 1-800-656-HOPE (4673)

**Want to Learn More?
Resources Below Available Online for Free**

- **[ACEs Primer \(KPJR Film\)](#)** - This five-minute primer gives a quick rundown on the landmark ACE Study and how experiences in childhood can echo in a patient’s health throughout the life course.
- **[The Science of Adversity and the Case for Systemic Empathy](#)** - In this TED Talk, Dr. Stan Sonu explains the role of empathy throughout the healthcare system in addressing the health impacts of ACEs and trauma.
- **[Building Adult Capabilities to Improve Child Health](#)** - Harvard University’s Center on the Developing Child describes the theory of change for achieving breakthrough outcomes for vulnerable children and families. It describes the need to focus on building the capabilities of caregivers and strengthening the communities that together form the environment of relationships essential to children's lifelong learning, health, and behavior.
- **[Center for Health Care Strategies and the National Council for Behavioral Health](#)** - To more formally operationalize trauma-informed care, the Center for Health Care Strategies and the National Council are developing recommendations for standardized screening and assessment tools, evidence-based clinical interventions, implementation processes, relevant and replicable outcome measures, and policy changes to improve patient and staff engagement, enhance health outcomes, and reduce avoidable care and excess costs.
- **[ACEs Connection and ACEs Too High](#)** - Community of practice and news site with information about trauma and healing for the public and for professionals.

About the Illinois ACEs Response Collaborative

Established in 2011, the [Illinois ACEs Response Collaborative](#) (the Collaborative) represents a broad range of organizations and agencies committed to expanding and deepening the understanding of the impact of childhood trauma and ACEs on the health and well-being of Illinois families and communities. The Collaborative works to develop education, policies, and responses to assist those who have experienced a high level of adversity, while simultaneously developing strategies to reduce the frequency and impact of ACEs as well as preventing their transmission to the next generation.

About Health & Medicine Policy Research Group

Health & Medicine is a Chicago based non-profit working to improve the health of all people in Illinois by promoting health equity. Founded in 1981 by Dr. Quentin Young, it was formed as an action-oriented policy center—nimble, independent, and focused on regional health issues. Health & Medicine’s mission is to promote social justice and challenge inequities in health and health care. It conducts research, educates and collaborates with other groups to advocate policies and impact health systems to improve the health status of all people. Health & Medicine has successfully developed health policy recommendations and implementation strategies for different public and private entities, earning the trust of the legislature, advocates, the media, researchers and policymakers at all levels of government in Illinois to become the region’s “honest broker” on healthcare policy matters. Learn more at www.hmprg.org.

*This brief and the work of the Collaborative is made possible by the **Illinois Children’s Healthcare Foundation**. For more information, contact us at 312.372.4292 or info@hmprg.org, or visit hmprg.org.*

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Endnotes

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