

ACEs High: The Invisible Score

Understanding your past, shaping your future.

Austan Sloan • Recover-You

A note before you begin. This guide contains a self-scoring questionnaire that asks directly about childhood abuse, including sexual abuse, neglect, and violence in the home. Answering those questions alone can bring up more than you expect. Consider having someone you trust nearby, or a plan for afterward, before you begin. You can read everything else in this guide and skip the questionnaire entirely; nothing later depends on it. The support lines below are open around the clock.

Feeling overwhelmed by what you're reading? Support is here. Call or text 988, Canada's 24/7 Suicide Crisis Helpline • In Alberta, call or text 211 for community, social, health, and government services • In Edmonton and area, call the 24/7 Distress Line at 780-482-HELP (4357) • Call 911 in an emergency.

What Are ACEs?

The Adverse Childhood Experiences (ACE) framework helps us understand how early adversity echoes across a lifetime. Not as bad memories. Not as emotional baggage you should have dealt with by now. As formative experiences that literally reshape how brains and bodies develop, at the biological level, before you had any say in the matter.

For years, many of us have grappled with the same questions: "Why the hell can't I just stop?" "What the hell is wrong with me?" "Why am I like this?" The ACE framework is the closest thing to an honest answer most of us were never given.

The Groundbreaking Study

In the late 1990s, Dr. Vincent Felitti and Dr. Robert Anda conducted the original ACE Study with more than 17,000 adults, most of them middle-class, educated, and privately insured. Not the group society typically flags as "high risk." That detail matters more than it might seem. The study revealed a direct, measurable link between early adversity (abuse, neglect, household dysfunction) and long-term outcomes in physical health, mental health, and behaviour. Across every demographic. In people nobody was looking at.

A Personal Reflection

The ACE Study was my entry point into the science of trauma. Before my first session of Accelerated Resolution Therapy (ART), I did what I always do: I researched. I found the study quickly, and had two reactions simultaneously.

The first was a wave of validation. Someone had finally put science and hard evidence to what I'd felt intuitively for years. The second was anger, and it hasn't fully left. "Why is no one talking about this in treatment centres?" When I asked clinicians about ACEs, their casual "oh yeah, we know about that" floored me. You know about it. And you're still not leading with it. If this information hit me with the force it did, I knew it could do the same for others. So why wasn't it central, rather than optional? Why was I thirty-something years into my own story before anyone pointed me toward the beginning of it?

For those of us who grew up asking "Why can't I just stop?" or "What is wrong with me?", the ACE framework offers something rare: context. Not as an excuse. As an explanation. Our struggles are not random defects or moral failings. They are adaptations to environments we never should have had to survive.

Important: ACEs are a probabilistic risk marker, not a destiny score. A higher score reflects higher odds of certain outcomes at the population level, not certainty for you as an individual. Think of the score as a canary in the coal mine: an early warning signal, not a prediction of collapse. ACEs also measure exposure, not experience. They do not capture severity, frequency, timing, duration, or the meaning of events, all of which strongly shape real-world impact. Two people can share the same score and carry very different biological and psychological burdens. Outcomes depend on protective factors, later-life environment, relationships, supports, and access to effective care.

The Data: One Pattern, Two Countries

Surprised by the ACE Study? You may be equally surprised to learn Alberta ran its own version. In 2013–2014, the province conducted a population-based ACE survey with just over 1,200 adult participants from across Alberta, and the findings didn't just mirror the U.S. data. They confirmed it.

United States — Original ACE Study (CDC–Kaiser)

About 64% of participants reported at least one ACE. Nearly two-thirds.

About 12.5% reported four or more. Roughly one in eight, the point where risk increases sharply.

Higher ACE scores were linked to mental illness, addiction, heart and lung disease, and shortened lifespan.

Alberta — 2014 ACE Survey

About 55% of Albertans reported at least one ACE. Over half.

About 11.8% reported four or more. Roughly one in eight and a half.

Higher ACE scores were linked to depression, substance use, chronic disease, and shortened lifespan.

Two different populations, decades apart. Same pattern. As scores rise, risk rises: higher rates of depression, substance use, suicide attempts, and chronic disease. That is a graded dose-response association, measured repeatedly across large populations. It does not prove that an ACE score directly caused any one person's illness. It does prove the pattern is too consistent and consequential to dismiss.

These results make one thing impossible to dismiss: ACEs are not an American problem, a big-city problem, or a problem confined to the populations we've decided to label as "at risk." They appear in every community, including the ones that look fine from the outside. Trauma is not rare. It is measurable, it is impactful, and the fact that it remains so poorly understood in our schools, our clinics, and our treatment programmes is not an accident. It's a choice we keep making by default.

Adverse Childhood Experiences are the single greatest unaddressed public health threat facing our nation today. — Dr. Robert Block, former President, American Academy of Pediatrics

The Ten Categories of Adversity

The study identified ten forms of adversity across three categories: abuse, neglect, and household challenges. Each "yes" counts as one point, giving a score from 0 to 10. Simple on paper. Anything but simple to live.

Abuse: physical abuse, emotional abuse, sexual abuse.

Neglect: physical neglect, emotional neglect.

Household challenges: witnessing domestic violence, substance use in the household, mental illness in the household, parental separation or divorce, an incarcerated family member.

The higher the score, the greater the exposure to developmental trauma, and the greater the measurable impact on health, behaviour, and biology. Not as a moral judgement. As a documented pattern across tens of thousands of lives.

One limitation worth naming. This score counts the number of types of adversity, not the severity, frequency, or duration of the events themselves. Two people can share the same score and carry very different burdens. The number is a starting point, not the whole story.

My ACE Score: A Personal Truth and a Generational Echo

When I first took the ACE test, my score was seven, possibly eight (I can't confirm it, as the relevant party is now deceased). The number itself didn't surprise me. But seeing my childhood distilled into a single digit landed like a punch to the gut. Not because it was shocking, but because it was so perfectly, clinically accurate. It also made something else impossible to ignore: trauma doesn't stop with one generation. My mother's score would almost certainly have been higher than mine. She carried many of the same afflictions I do. She died at fifty.

High ACE scores don't just predict risky behaviour. They are associated with measurable changes in stress regulation, immune function, and developing brain systems. The pathways are not identical in every person, and an ACE score cannot tell you what happened inside one individual body. But at the population level, the biological signal is real. This is why I often say:

I didn't build my nervous system for peace. I built it for war.

The ACE Questionnaire

Please read this before you answer. Some of these questions may bring up difficult emotions. Consider having support in place before you begin, and stop at any point if you need to. This is a screening tool, not a diagnosis, and no one else needs to see your answers.

Answer Yes or No based on your experiences **before age eighteen**. Each "Yes" equals one point. There are no right answers here, only honest ones.

1. Did a parent or adult in your household often insult, humiliate, or threaten you?

☐ Yes ☐ No

2. Were you often pushed, slapped, grabbed, or hit hard enough to leave marks or injuries?

☐ Yes ☐ No

3. Did an older person ever touch you sexually or pressure you into sexual activity?
☐ Yes ☐ No
4. Did you often feel unloved, unsupported, or unimportant in your family?
☐ Yes ☐ No
5. Did you often go without enough food, clean clothes, medical care, or basic protection?
☐ Yes ☐ No
6. Were your parents ever separated or divorced?
☐ Yes ☐ No
7. Did your mother, stepmother, or caregiver experience physical violence at home?
☐ Yes ☐ No
8. Did you live with someone who misused alcohol or drugs?
☐ Yes ☐ No
9. Did you live with someone who struggled with serious mental illness or attempted suicide?
☐ Yes ☐ No
10. Did a household member ever go to jail or prison?
☐ Yes ☐ No

My total score: _____ out of 10

Reading Your Score

A score of 0. An ACE score of zero doesn't erase hard things you may have faced, but on average it's associated with lower population risk. If you still recognize yourself in trauma reactions or health concerns, it's valid to seek support. ACE count is not the whole story.

A score of 1 to 3. At the population level, 1–3 ACEs are linked to modestly increased risks for mental and physical health challenges. What matters most is how your nervous system adapted. If parts of life feel harder than they should, trauma-informed care can help you recalibrate safety and connection.

A score of 4 to 5. Research often highlights 4+ ACEs as a threshold where risk for outcomes like depression, anxiety, substance use, and chronic illness rises notably. That risk is not destiny. With steady support, including therapy, safe relationships, and regulation skills, people heal and build durable resilience.

A score of 6 or more. At 6 or more ACEs, population-level risk for serious health effects increases further. If this score resonates, it's wise to connect with a trauma-informed therapist or clinic. Healing is absolutely possible, and you don't have to navigate it alone. You deserve care that matches what you've carried.

Important note on ACE scoring. The ACE questionnaire is a screening tool, not a diagnosis. Each category counts as one point whether it happened once or many times, and the total score does not measure severity, frequency, or the full impact of your experiences. Research shows that higher scores are linked to greater health risks at the population level (especially 4+), but even a single ACE can leave lasting effects depending on the person and their

circumstances. If your score resonates with your struggles, consider reaching out to a trauma-informed professional who can help you process it safely and begin healing. You deserve that support.

How Clinicians Read These Tiers

These groupings are not diagnoses, predictions, or sentences. They reflect statistical risk gradients observed across large population studies, meaning they describe what tends to happen at the population level, not what will happen to you specifically. Your number is a starting point for understanding. It is not a ceiling.

0–3, no ACE-associated health conditions: classified by ACEs Aware as lower risk for toxic stress. Lower risk does not mean no impact; severity, timing, and protective factors still matter. Care focuses on education about ACEs, toxic stress, resilience, and buffering supports.

1–3, with at least one ACE-associated health condition: classified as intermediate risk. Depression, anxiety, sleep disturbance, headaches, chronic pain, substance use, or chronic disease may raise concern. The score matters, but the score plus current health picture matters more.

4 or more: classified as high risk for toxic stress physiology, even without a current ACE-associated health condition. Higher odds of depression, anxiety, PTSD, suicidal ideation, substance use, cardiovascular disease, COPD, asthma, obesity, cancer, and stroke. The appropriate response is not panic. It is education, protective-factor assessment, and support.

The most harrowing finding. In the CDC-Kaiser mortality follow-up, participants with six or more ACEs who died during the study period died nearly 20 years younger on average than those with none: 60.6 years versus 79.1 years. That is a group-level association from one cohort, not a prediction of anyone's lifespan. Source: Brown et al., 2009.

How Early Adversity Rewrites the Body and Mind

A note on evidence. Research linking ACEs to later outcomes varies in strength. Some associations are robustly supported across large population studies. Others are grounded in plausible biological mechanisms and emerging evidence. What follows reflects that full spectrum: not all links are equally established, and none are universal. The goal is an honest picture, not a clean one.

The consequences of Adverse Childhood Experiences reach far beyond emotion, and far beyond what most people are ever told. The persistent activation of the body's stress response, known as toxic stress, doesn't stay psychological. It becomes biology: disrupting hormones, degrading immune function, and altering the physical architecture of the developing brain. The body keeps the score whether anyone is paying attention or not.

Read the list that follows correctly. These are population-level risk associations, not guarantees for any one person. Most links run through a handful of repeat pathways: stress biology, coping behaviours, and inflammation. Understanding the pathway is what makes it possible to interrupt it.

Pathway 1 — Coping and Behaviour Adaptations

Substance use and addiction: often arises as an attempt to self-medicate emotional pain and regulate an overactive nervous system.

High-risk sexual behaviours: often serve as attempts to feel connection, safety, or intense sensation to counter emotional numbness or distress.

Obesity and eating disorders: can develop as coping strategies, or through metabolic changes caused by chronic stress.

Pathway 2 — Stress-System Dysregulation

Chronic anxiety and depression: persistent stress-system activation can increase vulnerability to mood and anxiety disorders. It is one pathway, not the only cause.

PTSD and complex trauma: trauma is one of the strongest known risk factors, keeping the body trapped in a past survival state.

Suicidal thoughts and attempts: high ACE scores can multiply risk, reflecting the despair that can follow unhealed trauma.

Memory and concentration issues: chronic stress can impair the prefrontal cortex and hippocampus, areas critical for planning, focus, and memory.

Sleep disturbance and insomnia: a hyper-activated nervous system can block the deep restorative sleep the body needs to repair and regulate.

Pathway 3 — Inflammation and Long-Term Wear

Heart disease and hypertension: chronic stress is associated with higher cardiovascular risk through blood pressure, inflammation, metabolism, sleep, coping behaviours, and other pathways. It is one contributor, not a one-step cause.

Lung disease, even in non-smokers: chronic inflammation may reduce immune function and lung capacity over time.

Diabetes and metabolic disorders: prolonged cortisol elevation and inflammation can disrupt glucose metabolism and insulin sensitivity.

Cancer: systemic inflammation and dysregulated cell repair associated with chronic stress can contribute to increased risk over time.

Autoimmune disease: chronic stress can alter immune regulation and inflammatory signalling. Research links childhood adversity with higher autoimmune risk, but it does not support a simple story in which stress alone makes the immune system attack the body.

Chronic pain and fibromyalgia: pain can become centralised in the nervous system after prolonged hypervigilance. Not just from tissue damage, but from a system that never learned it was safe to stand down.

Does any of this sound familiar? For me, it was like reading my own medical and psychological history. Each line a piece of my life that had never once been connected to where it actually started.

There is a testable implication buried in all of this. If early adversity primarily affects health and addiction through stress-system dysregulation, then treatments that restore regulation should reduce relapse and symptom severity, even when abstinence-only or insight-based approaches fall short. Which means the question isn't just what someone is struggling with. It's what their nervous system learned to do to survive, and whether anyone has ever helped them unlearn it.

The Rewired Brain and Body

Research on chronic developmental stress shows measurable group-level differences in threat processing, regulation, learning, and stress physiology. The first years carry enormous leverage, but there is no single zero-to-five switch and no scan that proves what happened to one person. The brain that develops under chronic threat is not a broken version of a normal brain. It is a brain that adapted to the environment it was given.

Threat networks, including the amygdala, may become more reactive or respond to a wider range of cues.

Prefrontal regulation may lose influence under stress, making planning, emotional regulation, and impulse control harder when the system is activated.

The HPA axis can lose its timing and flexibility, leaving stress-hormone patterns elevated, blunted, mistimed, or slow to recover long after the danger has passed.

Think of it this way. A brain that developed in safety is like a family sedan: balanced steering, reliable brakes, a tuned engine built for the long road. A brain wired for survival is more like a demolition derby car. The accelerator is welded down. The alarm system never shuts off. The frame is reinforced for impact. And the brakes, the impulse control, the ability to pause before reacting, were barely built in the first place. It's a machine perfectly engineered for surviving chaos. It is exhausting and destructive to drive through ordinary life. And nobody who built it ever asked if that's what you wanted.

ACEs and Addiction: What the Experts Say

These are not fringe voices or alternative theories. They are some of the most cited researchers and clinicians in the fields of trauma, addiction, and developmental health. What they share, across different disciplines, countries, and decades of work, is the same conclusion: addiction is not a moral failing. It is a predictable response to unbearable conditions.

Dr. Gabor Maté — Vancouver physician and addiction specialist

His core question reframes everything: not why the addiction, but why the pain? Addiction is not a disease to be shamed or a weakness to be overcome. It is an attempt to self-medicate pain that nobody treated.

Addiction is a normal response to an abnormal situation. The trauma of early childhood is the abnormal situation. The addiction is the person's attempt to cope with the pain of that.

Dr. Bessel van der Kolk — psychiatrist, author of *The Body Keeps the Score*

Trauma is more than a memory. It can persist as learned threat responses, body sensations, emotions, and implicit associations that fire before conscious thought catches up. Addiction can become an attempt to turn down that alarm or escape emotional shutdown. Insight matters, but insight alone may not change reactions that have been rehearsed for years. Effective treatment may need skills, relationships, behaviour change, and trauma-focused work alongside words.

It's very important to have experiences that directly contradict the helplessness and despair of the trauma.

Dr. Peter Levine and Dr. Stephen Porges — somatic and polyvagal approaches

Levine describes trauma through a model of incomplete defensive responses and uses the language of survival energy; substances can become an attempt to mute activation or escape shutdown. Porges describes shifts among autonomic states and the human drive toward calm and connection. Both frameworks have influenced trauma therapy. Neither should be mistaken for a settled map of where trauma is stored or a complete explanation of addiction.

Dr. Nadine Burke Harris — pediatrician and public health leader

She discovered the ACE Study while treating children in San Francisco, and recognised immediately that what looked like behavioural problems were biological responses to accumulated adversity. She founded the Center for Youth Wellness to bring ACE screening into mainstream paediatrics, wrote *The Deepest Well* (2018), and as California's first Surgeon General launched ACEs Aware, a statewide initiative training providers to screen for ACEs and respond with trauma-informed care. Proof that this science can move from research to policy when someone refuses to let it stay academic.

The single most important thing we need today is the courage to look this problem in the face and say: this is real, and this is all of us.

Trauma and Relapse: Why Healing Matters

When trauma remains untreated, relapse isn't a surprise. At the population level, it's predictable. We just keep calling it a personal failure anyway.

In residential addiction treatment settings, studies consistently find roughly one in three patients meet full diagnostic criteria for PTSD, and broader trauma exposure, short of a formal diagnosis, is higher still.

People with PTSD are substantially more likely to develop a substance use disorder than people without PTSD. The size of that increase varies sharply by population, substance, sex, trauma history, and study design. The direction of the risk is clear. One universal multiplier is not.

In clinical addiction treatment settings, studies often find high rates of trauma exposure, although estimates vary widely with the sample and with whether trauma includes witnessed and indirect events. The responsible conclusion is not that virtually everyone has a trauma history. It is that assessment should be routine enough that trauma is not missed when it is present.

Why Trauma Healing Is Non-Negotiable in Recovery

Trigger: stress, memories, or reminders of trauma reactivate the original survival wiring, often without warning.

Physiological flashback: the nervous system floods with the same panic, shame, or numbness felt during the original event. The body doesn't know it's over.

Compulsion: without regulation tools, the brain defaults to its most reliable coping mechanism. The one that worked before. The one that's now the problem.

Outcome: relapse is not proof of failed character or weak will. It can happen when the pain driving substance use was never identified or treated. It can also arise through craving, withdrawal, cues, isolation, psychiatric illness, unstable housing, and other forces. The point is not that trauma explains every relapse. It is that ignoring trauma leaves a major relapse pathway untouched.

For decades, the field often treated PTSD and substance use as separate problems to be handled in sequence. Project Harmony pooled individual data from 36 randomized trials and more than 4,000 participants. Trauma-focused treatment produced stronger PTSD improvement than non-trauma-focused care, and the combination of trauma-focused therapy with medication for substance use produced the largest gains for PTSD and alcohol outcomes. Substance-use results were less uniform across treatments. The old blanket warning that trauma work is categorically unsafe in recovery did not survive the data. Pacing still matters. Readiness still matters. Indefinite avoidance is no longer defensible as the default.

The Shifting Dialogue: From Blame to Context

The old model often treated addiction as either a brain disease or a moral failure and focused narrowly on stopping use. A better model keeps what is true about the brain, then widens the frame: trauma, genetics, learning, pain, environment, poverty, connection, and access to care can all shape addiction. For many people, the substance became an attempted solution. Treatment has to understand the problem it was solving.

This shift is now formally recognized by major health organizations. SAMHSA states plainly that trauma is a risk factor for nearly all behavioural health and substance use disorders. In short, effective addiction treatment cannot assume that stopping substance use finishes the job. When trauma or unresolved pain helped make the substance necessary, treatment has to address that too.

ACE Scores Aren't Destiny: From Risk to Resilience

Your score is not your sentence. It is a risk marker, a map of what you were exposed to, not a verdict on who you are or what you're capable of. With awareness, the right tools, and people who actually understand what they're looking at, cycles can be broken. They have been. By people who started exactly where you are.

You are not defective. You are not broken. You are someone who adapted to conditions that should never have been yours to survive, and that same capacity for adaptation is exactly what makes healing possible. The nervous system that learned to protect you can learn something new. That's not hope. That's neuroscience.

Protective Factors and Pathways to Resilience

Even with a high ACE score, recovery is possible, and the research on what makes it more likely is remarkably consistent. These aren't feel-good suggestions. They are the documented factors that change outcomes.

Safe, stable, and nurturing relationships: healing begins in connection. Safety and co-regulation help repair attachment wounds and rebuild the capacity to trust others, and eventually yourself.

Access to trauma-focused therapy: evidence-based approaches can work directly on traumatic memories, meanings, avoidance, and body responses. Talk is not the enemy; treatment simply needs a method capable of changing the processes keeping the trauma alive.

Supportive peer communities: connection dissolves shame faster than almost anything else. Being genuinely known by people who don't flinch is part of the medicine.

Self-regulation practices: mindfulness, breathwork, and grounding exercises teach the nervous system that the present moment is safe, something it may never have been told before.

Opportunities for mastery: skill-building, creativity, and movement restore agency and self-worth. They show you that your life can be shaped, not just endured.

Before You Go

If you scored yourself just now, sit with this: the number you wrote down describes what happened to you. It does not describe you. Those are different things, and the whole purpose of this guide is to keep them apart.

Risk is not a verdict. It's information you can act on. The fact that most people never receive it is the problem this entire site exists to push back against. Nearly thirty years of evidence has been sitting in plain sight, and almost nobody in medicine, education, or treatment has been handing it to the people who most needed it.

If your score landed hard, please don't sit alone with it tonight. Tell someone. Call a line. Book the appointment you've been putting off. A number on a page is a starting point for a conversation, not a conclusion about your life.

You are not defective. You adapted. And that same capacity for adaptation is exactly what makes healing possible.

Feeling overwhelmed by what you're reading? Support is here. Call or text 988, Canada's 24/7 Suicide Crisis Helpline • In Alberta, call or text 211 for community, social, health, and government services • In Edmonton and area, call the 24/7 Distress Line at 780-482-HELP (4357) • Call 911 in an emergency.

Sources & Further Reading

These references provide the empirical, clinical, and public health foundation for this guide: the original ACE Study and its mortality follow-up, the Alberta replication, the clinical screening frameworks, the trauma and addiction comorbidity literature, and the treatment evidence on integrated care.

Felitti, V. J., Anda, R. F., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4), 245–258. *The original foundational CDC–Kaiser ACE Study with over 17,000 adults. Established the dose-response relationship between ACE score and adult health outcomes.*

Brown, D. W., et al. (2009). Adverse childhood experiences and the risk of premature mortality. *American Journal of Preventive Medicine*, 37(5), 389–396. *Longitudinal follow-up of 17,337 ACE Study participants. Among participants who died during follow-up, those reporting six or more ACEs died nearly 20 years younger on average than those reporting none. This is the source for the group-level mortality figure used in this guide.*

Felitti, V. J. (2002). The relation between adverse childhood experiences and adult health: Turning gold into lead. *The Permanente Journal*, 6(1), 44–47. *Accessible summary of the ACE Study findings written by the study's co-founder, documenting the dose-response relationship between ACE score and substance use outcomes.*

Dube, S. R., Felitti, V. J., Dong, M., Chapman, D. P., Giles, W. H., & Anda, R. F. (2003). Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use. *Pediatrics*, 111(3), 564–572. *Establishes the graded dose-response relationship between ACE score and illicit drug use initiation and addiction across age cohorts.*

Hughes, K., Bellis, M. A., Hardcastle, K. A., et al. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health*, 2(8), e356–e366. *Large-scale meta-analysis confirming the dose-response relationship across outcomes, including depression and anxiety odds at ACE score 4+.*

ACEs Aware. (2019). ACE clinical workflows, algorithms, and ACE-associated health conditions. California Office of the Surgeon General and California Department of Health Care Services. *Clinical guidance outlining ACE screening workflows and adult toxic stress risk categories. Primary source for the clinical tiers described in this guide.*

Bryan, R. H. (2018). Getting to why: Adverse childhood experiences' impact on adult health. *The Journal for Nurse Practitioners*, 15(2), 153–157. *Cites the published finding that a patient with an ACE score of 6 or more is substantially more likely to attempt suicide than a patient with a score of 0.*

PolicyWise for Children & Families. (2014). Alberta Adverse Childhood Experiences (ACE) Survey: Final Report. *Population-based survey of Albertans confirming local prevalence rates consistent with the original CDC–Kaiser findings, including a clear dose-response relationship.*

Centers for Disease Control and Prevention. About adverse childhood experiences (ACEs), and Preventing adverse childhood experiences. *The primary public health resources for ACE definitions, prevalence data, key health outcomes, and the evidence-based prevention strategies underpinning the protective factors section.*

Mills, K. L., Teesson, M., Ross, J., & Peters, L. (2006). Trauma, PTSD, and substance use disorders: Findings from the Australian National Survey of Mental Health and Well-Being. *American Journal of Psychiatry*, 163(4), 652–658. *General population survey of 10,641 Australians finding that over a third of those meeting criteria for PTSD also met criteria for at least one substance use disorder.*

Chilcoat, H. D., & Menard, C. (2003). Epidemiological investigations: Comorbidity of PTSD and substance use disorder. In Ouimette & Brown (Eds.), *Trauma and Substance Abuse*. APA. Also Ford, J. D., Russo, E. M., & Mallon, S. D. (2007). *Journal of Counseling & Development*, 85(4), 475–489. *Reviews and clinical literature documenting substantial PTSD–substance-use comorbidity. Estimates vary by population, substance, sex, trauma history, and study design; no single multiplier applies across groups.*

Ford, J. D., Hawke, J., Alessi, S., Ledgerwood, D., & Petry, N. (2007). *Behaviour Research and Therapy*, 45(10), 2417–2431. Also Farley, M., et al. (2004). *Journal of Substance Abuse Treatment*, 27(2), 161–167. *Clinical studies of treatment-seeking populations finding trauma exposure rates of up to 95% when broadly defined, establishing trauma history as near-universal in SUD treatment settings.*

Najavits, L. M., Weiss, R. D., & Shaw, S. R. (1997). *The American Journal on Addictions*, 6(4), 273–283. Also Kendler, K. S., et al. (2000). *Archives of General Psychiatry*, 57(10), 953–959. *Multiple studies of treatment-seeking populations finding that 50–66% of individuals in addiction treatment reported a history of childhood abuse.*

Hien, D. A., Morgan-López, A. A., et al. (2023). Project Harmony: A meta-analysis with individual patient data on behavioral and pharmacologic trials for comorbid PTSD and alcohol or other drug use disorders. *American Journal of Psychiatry*, 180(2), 155–166. *Pooled raw data from 36 randomized trials and 4,000+ participants. Found integrated, trauma-focused interventions generally outperform sequential approaches, and that the fear trauma work would destabilize early recovery was not supported.*

SAMHSA. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS Publication No. (SMA) 14-4884. *Foundational federal policy document defining trauma and the Six Key Principles of a Trauma-Informed Approach. States that trauma is a risk factor for nearly all behavioral health and substance use disorders.*

McEwen, B. S. (2007). Physiology and neurobiology of stress and adaptation: Central role of the brain. *Physiological Reviews*, 87(3), 873–904. *Comprehensive review of how chronic stress dysregulates the HPA axis and reshapes brain architecture through sustained glucocorticoid exposure and allostatic load.*

Burke Harris, N. (2015). How childhood trauma affects health across a lifetime. TED Talk. Also Burke Harris, N. (2018). *The Deepest Well*. Houghton Mifflin Harcourt. *The talk that introduced ACE science to a global audience, and the book-length exploration of the biological mechanisms, written by the clinician who took this work into public policy.*

Van der Kolk, B. A. (2014). *The Body Keeps the Score*. Viking. *Influential clinical synthesis of how trauma can be expressed through sensation, movement, emotion, implicit learning, and physiology. Its body-based language is best understood as a description of embodied responses, not as proof that*

autobiographical memories are physically stored outside the brain or that talk-based treatment is inherently inadequate.

Maté, G. (2008). *In the Realm of Hungry Ghosts.* Knopf Canada. *Ground-level account of addiction from decades of clinical work in Vancouver's Downtown Eastside, making the case that addiction is a response to unprocessed pain rooted in early adversity.*

Not medical advice. This guide is educational. If you are struggling, please reach out to a qualified professional or use the support lines above. © Recover-You • recover-you.ca