

**Building Resilience in DuPage County:
*Addressing childhood adversity in partnerships
and communities***

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*Toxic stress affects how we learn, how we parent,
how we react at home and at work, and what we create in our communities.
It affects our children, our earning potential, and the very ideas we have about
what we're capable of. What starts out in the wiring of one brain cell to another
ultimately affects all of the cells of our society,
from our families to our schools to our workplaces to our jails.*

- Nadine Burke Harris, M.D.,
The Deepest Well: Healing the Long-Term Effects of Childhood Adversity

Introduction

Many of us recognize the importance of a child's early experiences. The more we learn, however, the more we understand how critical these experiences in early childhood are, often influencing an individual's overall health and well-being throughout their entire life. Growing research shows that childhood adversity/trauma contributes to the development of chronic disease, mental illness, violence, disability, and early death. Adverse Childhood Experiences (ACEs), or experiences of abuse, neglect, and household stress as well as other experiences of adversity such as poverty, discrimination, and war before age eighteen, in the context of insufficient protective factors, can disrupt brain development and function, the brain's signals to the rest of the body, and our overall physiology. ACEs are common and are found in all demographics. The impact of ACEs has serious implications in every sector, including education and learning, health care and treatment, business and work performance, and beyond.

Even so, there is room for hope. Dr. Robert Anda, one of the principal researchers of the 1998 landmark ACEs study reminds us, "*what is predictable is preventable*". Therefore, every community member needs to be aware of how ACEs and other experiences of childhood adversity may have influenced their lives or the lives of people they know. Further, we must initiate and build upon trauma-informed services and practices in every organization: school, business, church, health care provider, and our criminal justice system. Most importantly, we must recognize the significance of positive relationships and social connections. We are in the powerful position to prevent, mitigate, and treat ACEs. This is a paradigm shift and an opportunity for transformation.

Equipped with this information, we can change our perspective from "*What's wrong with you?*" to "*What happened to you?*" "*What's right with you?*" and "*What can we accomplish together?*" Through our report, we will provide a basic overview of ACEs/childhood trauma, including research, terminology, and prevalence. We will also examine the current DuPage landscape, including existing resources, gaps in services, and how providers and stakeholders assess and approach trauma and healing in their community. Lastly, we will propose recommendations informed by our research and the input of local experts. We believe this work is life-changing and we look forward to beginning the conversation.

About the Federation

The DuPage Federation on Human Services Reform was formed in 1995 by a Governor's office initiative as one of five 'learning laboratories' whose role was to demonstrate a new approach to collaboration between government and community in the implementation of welfare reform. Since that time, our role has appropriately shifted to developing a broad system of supports for vulnerable families and improving the capacity of the human services system to meet increasingly complex needs. Current initiatives fall into one of the Federation's programs which include Community Planning, Training and Technical Assistance, the Language Access Resource Center (LARC), DuPage Early Childhood Collaboration, and Open Door.

The Federation exists to address issues that are beyond the ability of any one organization or sector to address. Adverse Childhood Experiences (ACEs)/childhood trauma is complex and manifests itself throughout the health and human services system and beyond.

Terminology

For reference purposes, we are providing the working definitions for the various concepts and terminology used in the field. While related, each has its own distinction.

Adverse Childhood Experiences (ACEs)	Defined in the 1998 Adverse Childhood Experiences Study, ten categories of stressful or traumatic events, including physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, intimate partner violence, mother treated violently, substance misuse within household, household mental illness, parental separation or divorce, incarcerated household member ¹ . There are additional adverse experiences in childhood but these ten were the focus of the ACE study.
Trauma	Individual trauma results from an event , series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being. ²
Complex Trauma	The term complex trauma describes both exposure to multiple traumatic events, often of an invasive, interpersonal nature, and the wide-ranging, long-term impact of this exposure on development and function. ³
Toxic Stress	Toxic stress occurs when a child experiences strong, frequent, and/or prolonged adversity – such as physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and/or the accumulated burdens of family economic hardship – without adequate adult support. This kind of prolonged activation of the stress response systems can disrupt the development of brain architecture and other organ systems, and increase the risk for stress-related disease and cognitive impairment, well into the adult years. ⁴
Trauma-Aware	Staff understand the term “trauma” and how it can change the way they view and interact with others. Workplace safety is a priority and the workplace considers both physical and mental health. ⁵
Trauma-Sensitive	The organization values a trauma-informed lens and identifies trauma and resilience in policies. Trauma training is institutionalized for all staff. Staff feel supported and understood in the workplace. ⁶
Trauma-Responsive	Staff applies knowledge of trauma and resilience in work. Staff utilizes language that supports safety, choice, collaboration, trustworthiness, and empowerment. ⁷
Trauma-Informed	The entire staff is skilled in using trauma-informed practices. Individuals outside the organization understand that trauma and resilience are at the center of our mission. ⁸ A program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization. ⁹
Resilience	The ability to bounce back. Process of managing stress and functioning well even when faced with challenges, adversity, and trauma. ¹⁰ All humans have the capacity for resilience but we are not born with it fully developed. Resilience must be cultivated in safe and loving relationships.

The Adverse Childhood Experiences Study, 1998

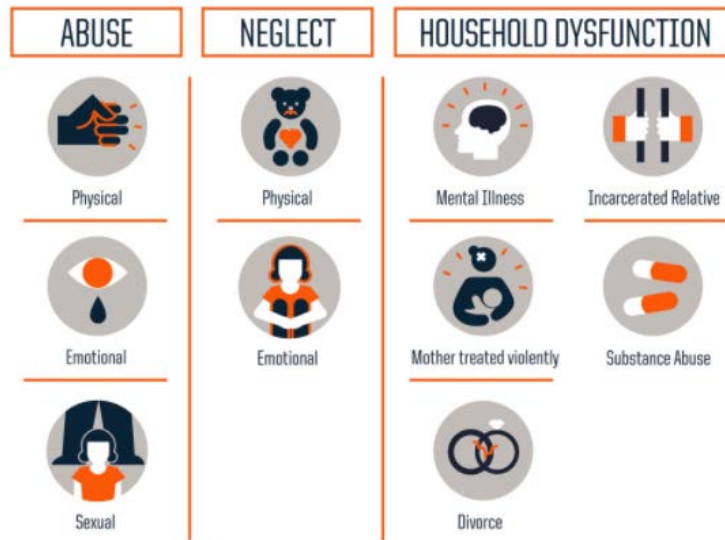
The landmark Adverse Childhood Experiences (ACEs) study¹¹ by Dr. Felitti and Dr. Anda published in 1998 revolutionized how we understand the impact of childhood adversity and subsequent trauma on health and behavior across the lifespan for those exposed. In the 1980s, Dr. Felitti, chief of Kaiser Permanente's Department of Prevention Medicine in San Diego, wondered why half of participants in his obesity clinic were dropping out. After a review of his patients' medical records, he also noted that participants had actually been losing weight when they left the program. Upon further review, he also discovered their weight was normal at birth and their changes in weight were erratic (not simply slow gain over a number of years). Dr. Felitti decided to conduct participant interviews to learn more. Through these conversations, participants began to reveal childhood adversity, particularly related to sexual abuse. *(To learn more, visit [ACEs Too High](#).)*

Dr. Felitti broadened his scope. He was connected with Dr. Robert Anda, a medical epidemiologist at the U.S. Centers for Disease Control and Prevention (CDC), who was researching how depression and feelings of hopelessness affected heart disease. Their idea was to add trauma-oriented questions to the medical questionnaire patients completed before examinations in Kaiser Permanente's Department of Preventive Medicine. The researchers asked 26,000 individuals "if they would be interested in helping us understand how childhood event might affect adult health" and over 17,000 agreed.

Questions were derived from the experiences that had most frequently surfaced from Dr. Felitti's obesity clinic patients as well as information found in similar research. In addition, emotional and physical neglect were added. The final ACE survey asked about experiences of abuse (physical, emotional, sexual), neglect (physical, emotional), and household distress (mental illness, substance abuse, mother treated violently, incarcerated household member, divorce). (Since this time, researchers recognize that additional experiences of adversity beyond the traditional ten that may also impact an individual. Follow-up research is exploring the role exposures to community violence, discrimination, bullying, foster care, the deportation of a family member, etc. may play in a person's lifespan.)

The ACE Study surveyed 17,421 patients at Kaiser Permanente in two waves, one in 1995 and another in 1997. Participants reflected the profile of their community. Seventy-five percent were white, 11% were Hispanic/Latino, 7.5% were Asian/Pacific Islander, and 5% were black. They were middle-class, middle-aged (average age was 57), 36% had attended college and 40% had

college degrees or higher. All were employed and had access to health care. The CDC website notes that they continue to track the medical status of study participants.¹²



Source: Centers for Disease Control and Prevention
 Credit: Robert Wood Johnson Foundation

The study uncovered a number of important findings. First, it revealed a connection between childhood adversity and physical, mental and social health and well-being later in life. Specifically, the adult onset of “chronic disease, as well as mental illness, doing time in prison, and work issues”.¹³

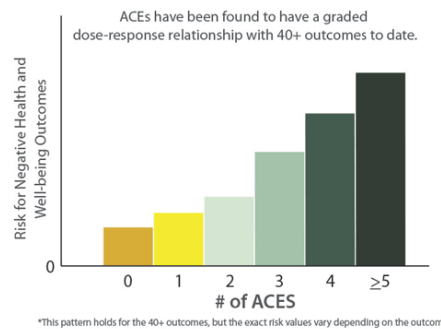


Source: U.S. Centers for Disease Control and Prevention (CDC)

Childhood adversity was common among participants. The study found that about two-thirds had experienced one or more types of ACEs.¹⁴ Moreover, the more ACEs the participants had, the higher overall risk of medical, mental health, and social problems they experienced as adults (referred to as a dose-response relationship). In fact, those individuals with four or more ACEs had a *dramatically* increased risk for issues related to disease and negatively impacted overall well-being, including such things as higher rates of depression, chronic obstructive pulmonary disease, illicit drug use, heart disease, liver disease, poor work performance, sexually transmitted diseases, smoking, obesity, suicide attempts, risk for intimate partner violence, poor academic achievement, and more. Subsequent research continues to support the finding that four or more is a “major risk factor for many health conditions”.¹⁵

ACES can have lasting effects on....

-  Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)
-  Behaviors (smoking, alcoholism, drug use)
-  Life Potential (graduation rates, academic achievement, lost time from work)



Source: U.S. Centers for Disease Control and Prevention (CDC)

The power of this research is in the revelation that the impacts are not just psychological, but rather “trauma alters brain development, function and structure, autonomic nervous system regulation, physiology, stress responses, and gene function (epigenetics)”.¹⁶ A child’s exposure to complex trauma has the potential to result in issues related to attachment, biology, affect regulation, dissociation, behavioral control, cognition, and self-concept.¹⁷

We have all experienced positive stress. It is a normal response to manageable adverse or even just challenging experiences. The body increases its production and release of stress hormones which have an effect on heart rate, blood pressure, respiratory rate, digestion and all functions of the brain and body. Parents or caregivers may provide guidance on how a child might manage stressful experiences. However, there are individuals that experience too much stress, or toxic stress. The body produces an “overload of stress hormones” and invokes flight, fight, or freeze responses. As one might imagine, there are severe consequences for the developing brain and

body when these responses are turned on for too long, are unpredictable or happen early in life (between conception and four years of age). Not only is the brain's architecture harmed, but the body has difficulty regulating itself. We now understand that over time, this wear and tear takes an immense toll.

There are also genetic consequences that can be passed on from generation to generation. Epigenetics, which means “above the genome”, refers to “changes in gene expression that are not the result of changes in the DNA sequence (or mutations)”¹⁸ Toxic stress may disrupt how genes function which not only affects the individual's body and brain, but also may be passed on from generation to generation.



Being aware of the (quite literal) deep implications of this information empowers us to develop effective strategies to prevent, lessen, and treat childhood trauma. To prevent, we must work to ensure that families and individuals have access to the basics, including but not limited to housing, food, health care, parenting support, etc., to develop safe and loving relationships and environments. To lessen trauma, families and communities must work together to help children build resilience, which is taught and learned. Research shows that meaningful relationships play a crucial role. And lastly, to treat trauma, trauma-informed interventions must be employed. Examples may include therapy, relaxation techniques, and other modalities.¹⁹ In the next section, this report will more deeply explore these strategies and how we might build and/or adjust our organizations, our systems, and our communities to respond most effectively.

Building Resilience and Healing

“Slowly but surely, we were building our toolkit of clinical interventions to combat the effects of toxic stress. Sleep, mental health, healthy relationships, exercise, nutrition, and mindfulness — we saw in our patients that these six things were critical for healing. As important, the literature provided evidence of why these things were effective. Fundamentally, they all targeted the underlying biological mechanism — a dysregulated stress-response system and the neurologic, endocrine, and immune disruptions that ensued.”

- Nadine Burke Harris, M.D., *The Deepest Well: Healing the Long-Term Effects of Childhood Adversity*

The good news is a lot has been learned over the last 20 years. We now know that there are many effective strategies to address toxic stress and trauma, build resilience, and promote healing. Many of the experts we consulted in the process of this report’s development underscored the importance of the basics -- safe, stable, and nurturing relationships and environments. One might argue that we undervalue the health and human services safety net. Research has demonstrated the positive impact as well as cost-effectiveness of home visiting programs, social supports for parents, access to sufficient income support and health care, mental illness and substance abuse treatment, and more. In order for parents and caregivers to build secure attachment, create safe and loving environments, and cultivate resilience, they need access to the basics. Only then may we make strides in preventing ACEs and ensuring everyone reach their full potential.

What *can* Be Done About ACEs?

These wide-ranging health and social consequences underscore the importance of preventing ACEs before they happen. **Safe, stable, and nurturing relationships and environments (SSNREs)** can have a positive impact on a broad range of health problems and on the development of skills that will help children reach their full potential. Strategies that address the needs of children and their families include:



Source: U.S. Centers for Disease Control and Prevention (CDC)

Why do some individuals who experience ACEs/toxic stress appear to overcome their adversity and others do not? The Center on the Developing Child writes that to build resilience, the single most common factor is “at least one stable and committed relationship with a

supportive parent, caregiver, or other adult”²⁰ These relationships function as a buffer in the face of adversity and also help develop and support key capacities related to behavior regulation. Ultimately, “resilience is the result of a combination of protective factors” and it’s the “interaction between biology and environment that builds a child’s ability to cope with adversity and overcome threats to healthy development”²¹ And it is never too late to start. The earlier in life, the more malleable the brain is, and incorporating “health-promoting activities can significantly improve the odds that an individual will recover from stress-inducing experiences”²². In her practice, Dr. Burke Harris found that sleep, mental health treatment, nutrition, exercise, healthy relationships, and mindfulness were powerful interventions. Other healing strategies include yoga and other rhythmic movement, creative self-expression, and animal-assisted therapy. The impact of these practices yields exponential benefits when those healthy adults pass along their healthy behavior and resilience building methods to future generations.

A program, organization, or system that is **trauma-informed**:

1. **Realizes** the widespread impact of trauma and understands potential paths for recovery;
2. **Recognizes** the signs and symptoms of trauma in clients, families, staff, and others involved with the system;
3. **Responds** by fully integrating knowledge about trauma into policies, procedures, and practices; and
4. Seeks to actively resist **re-traumatization**.

Source: SAMHSA

If we know what to do, then how best to do it? The Substance Abuse and Mental Health Services Administration (SAMHSA) recognizes “a trauma-informed approach can be implemented in any type of service setting or organization and is distinct from trauma-specific interventions or treatments.” SAMHSA defines trauma-informed as “based on knowledge and understanding of trauma and its far-reaching implications”.²³ One expects the clinical behavioral health field to be working within these parameters; although they have begun the work there is more to do. We also must turn to building awareness and capacity in other sectors. This issue belongs to all. These principles transcend interventions or treatments, and have the potential to make dramatic change.

Change takes time. A useful framework adapted by the Philadelphia ACE Task Force from the *Missouri Model: A Development Framework for Trauma Informed Organizations* outlines several organizational phases, including the states of being trauma-aware, trauma-sensitive, trauma-responsive, and trauma-informed (complete definitions provided in terminology section). Ultimately to be truly trauma-informed, trauma and resilience must be at the core, permeating throughout the organization's knowledge, perspectives, attitudes, and skills²⁴. In a later section, this report will explore what that might look like in various sectors.

The Self-Healing Communities Model

“In this new paradigm, it is becoming increasingly clear that direct-service interventions are necessary but not sufficient to produce transformative health improvements, generate population-based change, or catalyze the social movement necessary to address the scope of the problems generated by ACEs.”

- Self-Healing Communities: A Transformational Process Model for Improving Intergenerational Health (July 2016)



Source: Robert Wood Johnson Foundation, Self-Healing Communities

What if we think bigger? We must go deep. ACEs/trauma are at the root of so much pain and suffering. In order to transform our communities, our county, our state, and beyond, we must be willing to completely shift our perspective, and ultimately the culture. The Self-Healing Communities Model (SHCM) outlines the powerful process to build capacity, shift the narrative, empower individuals, and eventually change the culture. Using the SHCM, 42 communities in Washington State experienced dramatically reduced rates of major health and social problems, including child abuse and neglect, family violence, youth violence, youth substance abuse, dropping out of school, teen pregnancy, and youth suicide²⁵. This translated into significant cost savings as well. In the end, “better adapted, more resilient communities with high community capacity have extensive, community-wide networks of relationships through which reciprocity can flow and foster collaboration.”²⁶

Self-Healing Communities Model (SHCM): Essential Properties

(Porter, Martin, and Anda, 2016)

I. Partners

Partners each work in their own sphere of influence as meta-leaders, and together their insights and abilities link and leverage efforts, transcending the limitations of existing silos and services to generate connectivity and achieve unity of purpose.

In Self-Healing Communities, these same services are delivered in ways that also build community and social networks that will remain in the lives of clients after formal services have ended.

II. Principles

1. Inclusive leadership
2. Learning communities
3. Emergent capabilities
4. Engagement informed by neuroscience, epigenetics, adverse childhood experience and resilience research (NEAR)
5. Right-fit solutions
6. Hope and efficacy

III. Process

The SHCM process consists of four phases of community engagement:

1. Leadership expansion
2. Focus
3. Learning
4. Results

The phases of this process are powerful because success in each phase naturally invites the next, forming what systems-thinking experts call a virtuous self-reinforcing cycle that mirrors the emerging understanding of healthy living systems.

What Does the Data Tell Us?

A significant finding from the original Adverse Childhood Experiences (ACEs) study conducted at Kaiser Permanente was that two-thirds of the survey participants had experienced one or more types of ACEs. Of those, 87% had experienced 2 or more types.²⁷ Subsequent research nationally has found that between 50-67% of individuals have at least one ACE and 13 – 17% have four or more. An ACE score of four or more predicts significantly increased risk of poor health and social outcomes. Prevalence of ACEs does not vary much across geography, and they are common in every socioeconomic group.²⁸ As one might expect, research shows there are certain at-risk populations with higher rates of ACEs and other experiences of childhood adversity (poverty, everyday discrimination, historical trauma), including people experiencing homelessness²⁹, youth in juvenile detention³⁰, etc.

Many states have begun collecting ACE data through their annual Behavioral Risk Factor Surveillance System (BRFSS) survey, whose sample includes adults 18 years old and older. After advocacy efforts, Illinois began collecting ACE data in 2013. Follow-up data was collected in 2017 although results were not available at the time this report was completed. While we have access to statewide data, county-level data is not currently available. That said, because the rates of ACEs are stable across localities around the country, it is likely that the state rates reflect county rates.

Data from 2013 estimated that 50.6% of Illinois adults had at least one ACE and approximately 1 in 6 reported four or more. Adults 65 years and older reported slightly fewer ACEs just like in the original study³¹.

Additional key findings from the Illinois ACEs Response Collaborative's analysis of 2013 Illinois BRFSS data include:

- Approximately 1 in 6 women and 1 in 10 men reported experiencing 4 or more ACEs.
- About 18% of both African American and Hispanic adults and 13% of White adults reported 4 or more ACEs.
- More education may be protective. Nearly 1 in 5 of those with only a high school diploma report 4 or more ACEs, while only 1 in 10 of those with a post high school degree report 4 or more ACEs.
- While approximately half of Illinois adults reported at least one ACE, the highest percent for an individual ACE was 34% for verbal abuse. Of note, 16% report physical abuse and almost 10% report sexual abuse.

Why Does It Matter?

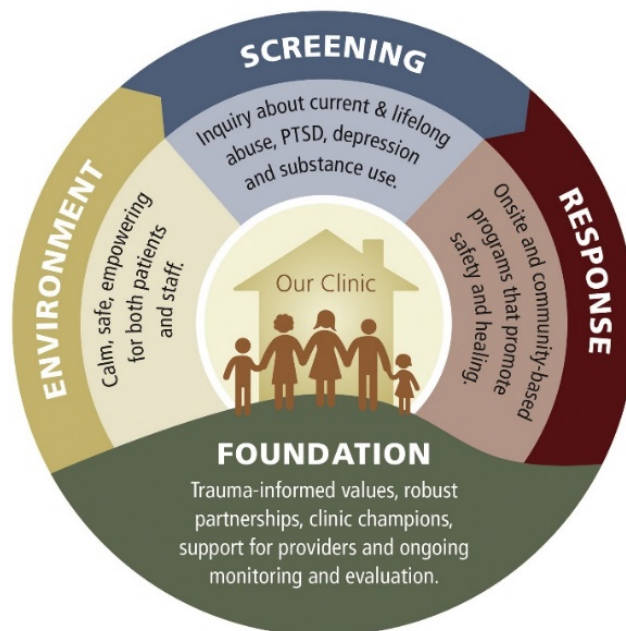
Health Care

Clearly, further research and training are needed to help medical and public health practitioners understand how social, emotional, and medical problems are linked throughout the lifespan. Such research and training would provide physicians with the confidence and skills to inquire and respond to patients who acknowledge these types of childhood exposures. Increased awareness of the frequency and long-term consequences of adverse childhood experiences may also lead to improvements in health promotion and disease prevention programs. The magnitude of the difficulty of introducing the requisite changes into medical and public health research, education, and practice can be offset only by the magnitude of the implications that these changes have for improving the health of the nation.

- Vincent Felitti, M.D., F.A.C.P., Robert Anda, M.D., M.S.,
Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults, 1998

As we have discussed, ACEs present severe consequences for a person’s health across their lifespan. Chronic toxic stress takes a huge toll on the body. Living in a toxic stress environment makes the body “pump out adrenaline and cortisol continuously” which then can “keep blood pressure high, which weakens the heart and circulatory system”. Further, this may keep “glucose levels high to provide enough energy for the heart and muscles to act quickly”.³² High amounts of cortisol may lead to the onset of a range of diseases. A body experiencing prolonged toxic stress has difficulties producing enough cortisol. Without appropriate cortisol levels, the body’s inflammatory response is off-kilter. These disruptions contribute to the shortened lifespan of people with an ACE score of six or higher.

Trauma-informed Primary Care



Machtiger, E. L., Cuca, Y. P., Khanna, N., Dawson Rose, C., & Kimberg, L. S. (2015). From Treatment to Healing: The Promise of Trauma-Informed Primary Care. *Women's Health Issues*, 25(3).

In order to adequately respond, we must integrate ACEs/toxic stress research and training in all fields. If we ignore its importance, we will never get at the roots of a person's health. Dr. Burke Harris writes that everyone has a role in this issue, and that "understanding the mechanism of how ACEs lead to toxic stress gives us a powerful tool to shape both our medical response and our public-health response."³³

Health care providers are uniquely positioned to screen and identify ACEs in patients, which likely will lead to early intervention. There is a role for all health care providers, but especially obstetricians, pediatricians, and primary care physicians. In 2012, the American Academy of Pediatrics released a policy statement on childhood adversity and toxic stress supporting the leadership role for pediatricians. Machtinger, et al. (2015) outline the components of trauma-informed primary care (graphic above) which include *environment* (includes training all staff and physical space considerations), *screening* (routinely and universally), *response* (trauma-informed services, building community partnerships, and facilitating referrals), and *foundation* (core set of trauma-informed values). While it's understood that this work will take time, it has the potential to improve the overall health of everyone. At the end, trauma-informed primary care is "good patient-centered care".³⁴

Pediatricians are now armed with new information about the adverse effects of toxic stress on brain development, as well as a deeper understanding of the early life origins of many adult diseases. As trusted authorities in child health and development, pediatric providers must now complement the early identification of developmental concerns with a greater focus on those interventions and community investments that reduce external threats to healthy brain growth. To this end, AAP endorses a developing leadership role for the entire pediatric community—one that mobilizes the scientific expertise of both basic and clinical researchers, the family-centered care of the pediatric medical home, and the public influence of AAP and its state chapters—to catalyze fundamental change in early childhood policy and services. AAP is committed to leveraging science to inform the development of innovative strategies to reduce the precipitants of toxic stress in young children and to mitigate their negative effects on the course of development and health across the life span.

- Excerpt from the American Academy of Pediatrics Policy Statement: *Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science into Lifelong Health*, 2012

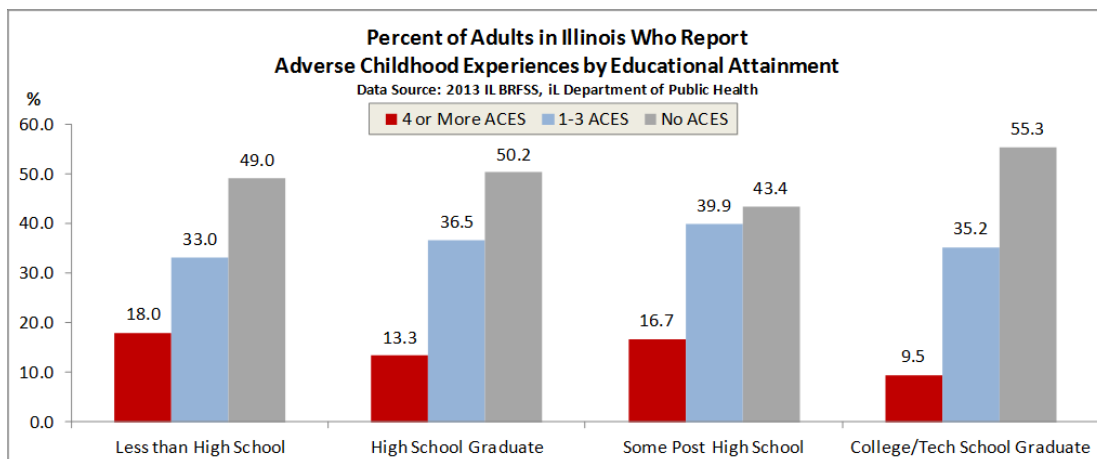
Education

Maintaining a strong connection to school and to caring adults throughout the building is a powerful way to buffer the negative impact of pervasive stressors. Schools are one important place in a community that can reduce the negative impact of ACEs on children's health and development.

- Olga Acosta Price and Wendy Ellis, *Student Trauma is Widespread. Schools Don't Have to Go It Alone*, Education Week, 2018

Schools often function as the center of our communities, anchoring our neighborhoods, supporting our families, and teaching our children. Schools educate broadly, not merely facts and information, but also teaching real-life skills, including social, emotional, cognitive, and more. When a student walks into a classroom, they bring their life experiences with them. It's estimated nationally that 47% of all school-age children have at least one ACE and nearly 22% have two or more. This same report estimates that about 20% of children in Illinois have two or more ACEs³⁵. This has major implications for our classrooms, in terms of potential academic impairments as well as the capability for education to function as a child's buffer or protective factor.

Students with ACEs may struggle with organization, memory, regulating emotions and/or behavior, and have difficulty with attention, focus, and concentration³⁶. As one might imagine, these challenges can have life-long repercussions, often times lead to overall learning and behavior issues, disengagement, and the likelihood of dropping out. The 2013 Illinois Behavioral Risk Factor Surveillance System (BRFSS) data estimated that nearly 1 in 5 of adults who did not finish high school reported four or more ACEs, while only 1 in 10 of adults with a post high school degree reported four or more³⁷.



In the Illinois ACEs Response Collaborative's [Education Brief: ACEs for Educators and Stakeholders](#), they provide staggering data on how ACEs impact students:

- Students with three or more ACEs are 2 ½ times more likely to fail a grade.

- Students with three or more ACEs are significantly more likely to be unable to perform at grade level, be labeled as special education, be suspended, be expelled, or drop out of school. Students not reading proficiently by third grade are four times less likely to graduate from high school.
- The impact of ACEs on school performance has a ripple effect on lifetime achievements. For high school dropouts, the national unemployment rate is 12%. Young adult high school dropouts were more than twice as likely as college graduates to live in poverty according to the Department of Education.

Schools must not underestimate their power to change a student's trajectory. Through the development of this report, we have become aware of a number of promising practices occurring in DuPage County schools. To share and build on that work, we recommend exploring the following trauma-informed concepts for the classroom:

1. ***Collaborative communities*** – School and community partnerships are essential in providing needed support and interventions to students and their families (West Chicago School District 33 WeGo Together for Kids is a great example of this). It is crucial to leverage resources and facilitate access to community resources. Schools cannot do this alone.
2. ***Training*** – All members of the school community benefit from learning skills to recognize and appropriately respond to signs of trauma, from administration to bus drivers to teachers to cafeteria workers and beyond. Responding to all students, other staff, family, and community members with respect is just good practice. We must recognize that school personnel may be that much needed committed and reliable adult in a student's life.
3. ***Create calm and safe classrooms and learning environments*** – Techniques including self-regulation (e.g., Leah Kuypers' Zones of Regulation), mindfulness, communication (e.g., Michelle Garcia Winter's social communication curricula) and conflict resolution skills help foster focused and calm classrooms.
4. ***Explore tools to identify students in need of resources and support***
5. ***Restorative justice and/or mindful disciplinary practices*** – In Illinois in 2015, Senate Bill 100 eliminated automatic zero tolerance suspensions and expulsions and mandated that educational institutions offer students access to counseling and other supports. As a result, we think restorative justice and/or mindful disciplinary practices should be explored to support feeling safe and comfortable so they have their ability to behave at their best as well as to address root causes of sub-optimal behavior.

Early Childhood

All the science about the development of the neuro-endocrine-immune system tells us one thing: intervening earlier is better (and I mean way, way, way better). That's not to say that older kids and adults with ACEs can't benefit from interventions, but the later we start, the more intensive (and expensive) the treatment has to be and the less likely it is to be effective. The reason for this is that starting earlier gives us more tools to work with.

- Nadine Burke Harris, M.D., *The Deepest Well: Healing the Long-Term Effects of Childhood Adversity*

We know that early childhood is an especially important moment in a person's life. The Center on the Developing Child at Harvard University's report, *From Best Practices to Breakthrough Impacts*, provides a good summary:

- Responsive relationships and positive experiences build strong brain architecture;
- Adversity disrupts the foundations of learning, behavior, and health; and
- Protective factors in the early years strengthen resilience

How do we promote this? Over the years, research has been conducted seeking to identify the “best” programs and services to replicate. It's difficult to single out one program or practice. Instead, the research has been able to identify the key characteristics associated with positive outcomes (see below).³⁸ We must ensure that our caregivers, early childhood sites and systems are provided the information and resources to positively support and influence our children's lives.

Lessons from Research to Improve Programs

1. ***Build caregiver skills***
Help adults – parents, teachers, child care staff – to strengthen their skills so they can support the healthy development of the children in their care.
2. ***Match interventions to sources of significant stress***
Tailor interventions to address sources of significant stress for families, such as homelessness, violence, children's special needs, or parental depression
3. ***Support the health and nutrition of children and mothers before, during, and after pregnancy***
4. ***Improve the quality of the broader caregiving environment***
Improve the quality of the broader caregiving environment and increase economically disadvantaged families' access to higher-quality care
5. ***Establish clear goals and appropriately targeted curricula***
Establish clearly defined goals and implement a curriculum or intervention plan that is designed to achieve those goals.

Source: Center on the Developing Child Harvard University,
[From Best Practices to Breakthrough Impacts](#)

Experiences in early childhood set the stage for learning and well-being. The Center for the Study of Social Policy argues that we need to go beyond simply academic preparation, but also focus on social-emotional competence including self-esteem, self-confidence, self-efficacy, self-regulation/self-control, personal agency, executive functioning, patience, persistence, conflict resolution, communication skills, empathy, social skills, and morality all of which can only be cultivated when children feel a sense of safety and of love and belonging. Quality experiences built on secure attachment allow a child to explore these competencies. As discussed earlier in the report and reiterated here, “numerous research studies show that a relationship with a consistent, caring and attuned adult who actively promotes the development of these dimensions is essential for healthy social-emotional outcomes”.³⁹ For example, using the *Strengthening Families Protective Factors Framework* to invest in resilience, social connections, knowledge of parenting and child development, concrete support in times of need, and social-emotional competence of children, enables parents and caregivers to build their protective capacities.⁴⁰

Business

If you want a strong community from which to draw employees, you want a healthy community. Your employees have ACEs; their kids have ACEs. This isn't a problem for the YMCA or social services to figure out; this is a problem for your business.

- Todd Garrison, ChildWise Institute

In business, ACEs manifest themselves in low productivity, morale issues, attendance, high turnover, and increased health care costs. Anda, et al. argue that “exposure to such adverse circumstances is likely to lead to massive financial expenditures for health care as well as to economic losses attributable to poor work performance”⁴¹ Metzler, et al. (2016) found that “early adversity can negatively impact adult education, employment, and income” and prevention “may be more successful if they broaden public and professional understanding of the links between early adversity and poverty and the structural barriers that reduce the likelihood of moving out of poverty”.⁴² According to 2013 Illinois BRFSS data, twice as many adults with 4 or more ACEs report being unemployed compared to those with fewer or no ACEs. Adults with 4 or more ACEs were also somewhat more likely to say that they were unable to work.⁴³

If business leaders want a healthy, competent, and productive workforce, they must recognize the role childhood adversity might play in a person’s life. As Anda, et al., discuss “job training, technologic improvement in production, and medical care for injury” will not get at the root and will likely fail, so instead we need a “paradigm shift”.⁴⁴ We encourage business leaders to learn about the impact of ACEs on worker performance and well-being and communicate the importance of understanding the science of ACEs to each other and to workers. In turn, creating a supportive environment by using trauma-informed principles and strategies will be a win-win for both employers as well as employees.

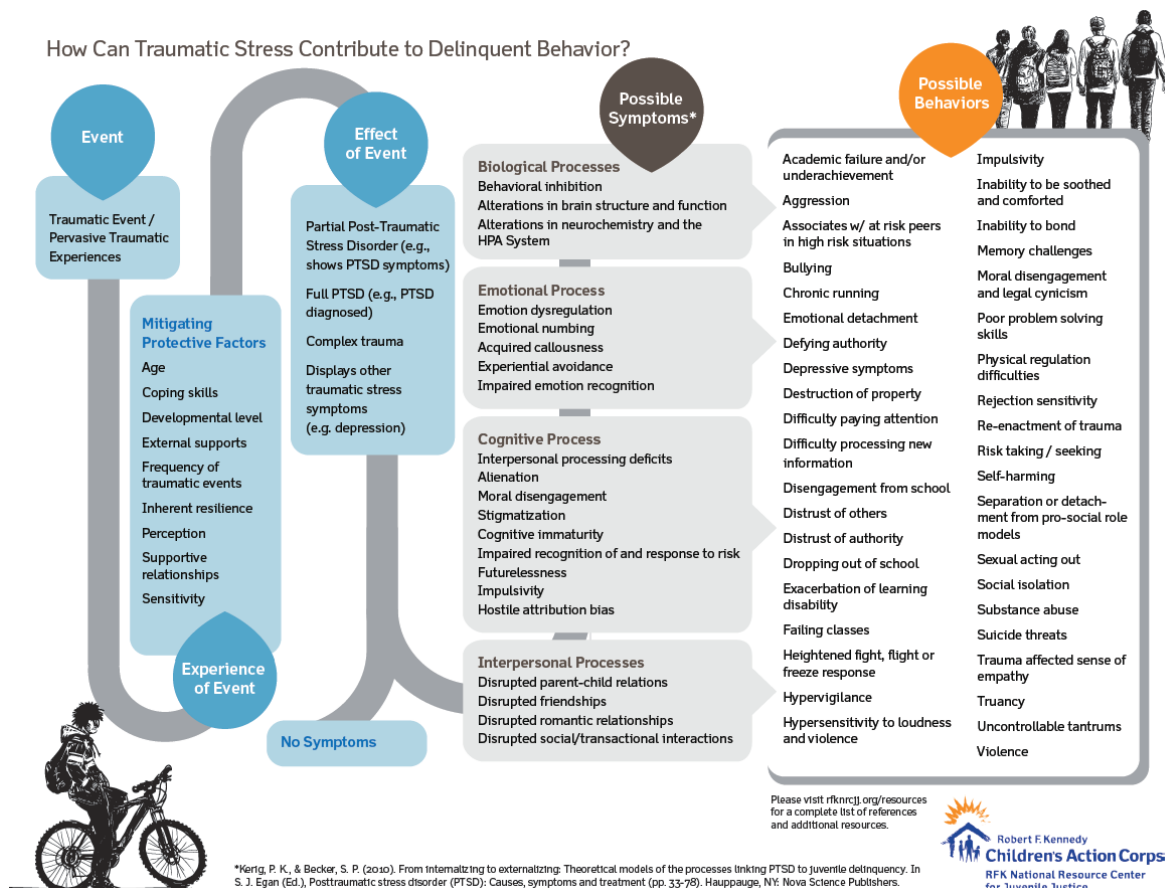
Examples⁴⁵ may include:

- Trauma-informed human resources policies and practices
- Safe and supportive environments that encourage social connections
- Promoting awareness of the impact of ACEs
- Building relationships with local health and human service organizations and connecting employees to them

Criminal Justice System

This report has focused heavily on how ACEs impact the health and overall well-being of individuals. Research also shows that high percentages of justice-involved persons have experienced childhood adversity and complex trauma. Traumatic events and/or experiences lead to symptoms that may in turn lead to behaviors that may lead to justice involvement, which in themselves are stressful. Not only are there social consequences for criminal justice system involvement, there are also immense costs associated with justice involvement.

As the GAINS Center for Behavioral Health and Justice Transformation explains, “trauma-informed criminal justice responses can help to avoid re-traumatizing individuals” which in turn “increases safety for all, decreases the chance of an individual returning to criminal behavior, and supports the recovery of justice-involved women and men with serious mental illness⁴⁶.” When the system effectively supports recovery and healing, justice-involved women and men may be able to better care for their children, which may result in the disruption of ACEs throughout generations.



The Johns Hopkins Urban Health Institute provides a number of practical recommendations to consider when developing a “trauma-informed” justice system⁴⁷, including:

- Crisis intervention training for police departments, first responders, and all involved
- Adequate trauma screening for staff and for incarcerated citizens
- Prevention of further traumatization within the justice system, such as staff training
- Collaboration across systems and relationships
- Adequate and appropriate services
- Support systems and training for criminal justice system employees (e.g., self-care techniques)
- Increased public awareness about the role that trauma plays in the criminal justice system

Another promising practice is restorative justice, “a process whereby all the parties with a stake in a particular offense come together to resolve collectively how to deal with the aftermath of the offense and its implications for the future⁴⁸.” Latimer, et al. found that restorative justice programs “are a more effective method of improving victim/offender satisfaction, increasing offender compliance with restitution, and decreasing the recidivism of offenders when compared to more traditional criminal justice responses⁴⁹.” This research supports further exploration of ways to incorporate restorative justice practices into the current system across sectors.

DuPage County Trauma-Informed Care Landscape

For a baseline understanding of the DuPage trauma-informed care landscape, the Federation disseminated an electronic survey to community partners in February 2018. Seventy respondents representing housing, education, health care, human services, and justice involved organizations. Most respondents were from human services (44%). Education (21%) and justice-involved (16%) organizations responses were significant. While we got a smaller percentage of health care respondents, they did represent the larger health systems and local Federally Qualified Health Clinics (FQHCs) in the county (surveys were not distributed to local physician practices).

Respondents were fairly well dispersed in terms of size by the number of employees which we believe will give us a good indication of how organizations with various workforce sizes approach trauma-informed care.

Findings

Stages of Trauma-Informed Care

Quite a few organizations reported already implementing trauma-informed care in multiple programs (34%) and a sizable portion were actively exploring becoming trauma-informed (21%). Close to 15% of respondents said they were unsure of the meaning of trauma-informed and only four organizations responded they were entirely trauma-informed (6%). It was more likely that human service organizations were trauma-informed, while the education and health care respondents were mostly actively exploring trauma-informed care.

Are your clients impacted by ACEs?

Seventy percent (70%) of organizations believe that their clients are either extremely or very impacted by trauma. A minority of organizations (24%) responded that their clients are either moderately or slightly impacted. No organizations selected that their clients were not at all impacted by trauma, and three stated that the question did not apply (4%).

Providing Trauma-Informed Care

Sixty-four percent (64%) of respondents selected that they are providing trauma-informed services and most of those services were related to counseling and other mental health services. A number of organizations provided interventions including cognitive behavioral therapy (CBT), dialectical behavioral therapy (DBT), group therapy, and more.

Barriers to Providing Trauma-Informed Services

A lack of training and a lack of information were the most common barriers. Respondents listed budgetary concerns, access to training, lack of buy-in, and difficulties raising awareness both inside and outside of the organization as significant issues.

Training

Over half of respondents have not received training on trauma, but were interested in receiving training. Organizations had received training both internally and externally. Multiple organizations noted being trained by the Consortium for Educational Change and the Illinois Coalition on Youth. The majority of education and health care respondents had not received training on trauma.

Screening

Over half of respondents do not use screening tools. The 47% of organizations that do use a screening tool use many different types, only two specifically mentioned ACEs. Respondents listed staff discomfort, lack of time, lack of client trust, liability concerns, and buy-in issues as barriers. Respondents from human service organizations believe their staff to be confident in their ability to identify trauma symptoms in clients, however most other organizations believed that their staff was not confident and suggested training would address this.

Referrals

Respondents listed a number of active referral agencies and the DuPage County Health Department was identified numerous times. Barriers to making referrals included lack of awareness, difficulty navigating systems, long wait lists, and insurance.

Conclusion

Overall, local organizations understand that ACEs/trauma impacts the individuals they see, be it clients, patients, or students. There is a demonstrated need to build community capacity through training, information, and resources. If we connect the dots, we will be able to create a coordinated and inclusive response that we believe will be more effective than any one organization or sector could do alone.

Recommendations

When we understand that the source of so many of our society's problems is exposure to childhood adversity, the solutions are as simple as reducing the dose of adversity for kids and enhancing the ability of caregivers to be buffers. From there, we keep working our way up, translating that understanding into the creation of things like more effective educational curricula and the development of blood tests that identify biomarkers for toxic stress - things that will lead to a wide range of solutions and innovations, reducing harm bit by bit, and then leap by leap.

- Nadine Burke Harris, M.D., The Deepest Well: Healing the Long-Term Effects of Childhood Adversity

The Federation makes recommendations based on research and interviews with local experts.

Creation of a local multi-sector collaboration

Throughout key informant interviews as well as the survey, partners expressed a need and willingness to participate in a multi-sector, countywide collaboration. They expressed the need to share experiences and connect with others. There is a significant amount of work going on in DuPage County, and we believe through coordination we could further the impact. The Self-Healing Communities Model provides a possible roadmap to develop “right-fit solutions that address the complexity of problems and will inspire emergent change in different community environments at a modest cost⁵⁰.”

We recognize that there is a lot to learn and envision the collaboration to function as an incubator and learning lab for exploring local issues related to training, public awareness, screening, data, and policy issues. The collaboration will also work closely with the statewide collaboration as well as any relevant national entities.

Training, training, and more training

An overwhelming theme that emerged in key informant interviews and survey responses was the need for training in every sector. A number of survey respondents identified that they had received training but wanted more. Through the development of this profile, we identified a number of training resources. We will create a training inventory and work to close any gaps either related to topic or level of information.

Increased public awareness

Throughout the research on promising practices, increased public awareness surfaced as a key component of any successful program or service delivery model. Larger than that, when individuals learn about the science of ACEs, it's often described as a turning point, providing the language and the framework to view oneself, other community members, and the world in a very new, different, and compassionate way. We envision a county where information about ACEs

and healing is found everywhere, including waiting rooms, classrooms, faith-based communities, billboards, human resources policy manuals, and more.

Further, we recognize the importance to create an inclusive and strengths-based viewpoint: “shaping a new narrative about the childhood roots of diminished adult life opportunities and the impact across generations includes creating an understanding that ‘making healthy choices’ is simply not an option for some families and that more is needed to prevent childhood adversity⁵¹”. We aim to increase awareness that this is not an ‘us and them’ experience, but rather an issue that affects us all and that we are best positioned to solve together.

Good public awareness examples include the Center for Youth Wellness [Stress Health](#), the Illinois Childhood Trauma Coalition’s [Look Through Their Eyes](#) website, and the [Iowa ACEs 360 Connections Matter](#) site.

Universal Screening

Although many screening tools for childhood adversity and protective factors appear promising, there are currently no best practice guidelines available. We support the ongoing research and exploration of implementing toxic stress screenings in medical settings and possibly beyond.

Explore diagnosis issues

Throughout our conversations and research, the issues of diagnosis and reimbursement emerged. Dr. Bessel van der Kolk and other mental health professionals have discussed the limitations with the currently available diagnostic models found in the Diagnostic and Statistical Manual of Mental Disorders

(DSM-5). They argue the diagnoses available do not adequately reflect the range and impact of childhood trauma. As a result, individuals are often misdiagnosed (e.g., Attention Deficit Hyperactivity Disorder, or ADHD) and subsequently, incorrectly treated. The addition of



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Developmental Trauma Disorder (DTD), which experts argue recognizes how exposure to trauma presents itself through the developmental lifespan, to the DSM has been proposed⁵². We believe this issue warrants discussion.

Prevent childhood adversity by supporting a trauma-informed safety net system

As discussed earlier in this report, when families and individuals have access to basic needs and social connections, childhood adversity is more likely to be averted. Not only does the safety net system provide critical services and resources, but it is also cost-effective. In 2012, the CDC estimated that the average lifetime cost per victim of nonfatal child maltreatment was \$210,012 when considering expenses related to health care, productivity losses, child welfare, criminal justice, and special education.⁵³ Programs such as perinatal home visiting, early intervention, parenting education, and family support services are evidence-based strategies.

Moreover, recent research conducted with Temporary Assistance for Needy Families (TANF) programming found that financial empowerment education alongside trauma-informed peer support was more effective than basic TANF programming (no trauma-informed element) at improving behavioral health, reducing hardship, and increasing income for vulnerable families⁵⁴. Trauma-informed, culturally competent safety net services and programs have the potential to not only prevent childhood adversity but also to boost overall well-being and prosperity.

Learn more about local prevalence to further the case

As research has shown, prevalence data is fairly consistent across populations and demographics. This general data is useful for public awareness purposes, but as we seek to develop targeted interventions and solutions, we may need more local data. We recommend working with community partners to integrate trauma-related questions in existing local data collection efforts.

Promote an ACEs Policy Agenda

There are a number of promising practices as well as evidence-based, successful programs and services that work to prevent and treat childhood trauma. We need public policy to support these efforts. As The National Child Traumatic Stress Network outlines, “policymakers play a critical role in ensuring that the assessment and treatment of child trauma are integrated across systems and programs” and “related financing and other resources is also crucial⁵⁵”. There have

been a number of recent legislative activities co-sponsored by Illinois senator Dick Durbin and Illinois Congressman Danny Davis, such as the [*Trauma-Informed Care for Children and Families Act of 2017*](#) which establishes task forces, Medicaid demonstration projects, and encourages state data collection as well as [*House Resolution 443 – Recognizing the importance and effectiveness of trauma-informed care*](#). We see the continued need for comprehensive local, state, and national public policy.

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