

PART III

California's Response to Adverse Childhood Experiences and Toxic Stress



Roadmap for Resilience:
The California Surgeon General's Report on
Adverse Childhood Experiences, Toxic Stress, and Health

State Tools and Strategies for Responding to ACEs and Toxic Stress

Many states now collect data on the prevalence of Adverse Childhood Experiences (ACEs) as part of the Behavioral Risk Factor Surveillance System overseen by the United States (US) Centers for Disease Control and Prevention (CDC). In 2018, the National Conference on State Legislatures issued a report, *Preventing and Mitigating Adverse Childhood Experiences*, detailing strategies that lawmakers may utilize to reduce ACEs and toxic stress.¹²²³ The report highlighted that between January and May of 2018, at least 68 legislative proposals in 25 states incorporated ACEs. State-specific policy responses targeting ACEs can be found in the [Injury Prevention Legislation Database](#) of the National Conference of State Legislatures,¹⁵²⁸ and on the ACEs Connection website under “[Map the Movement](#).”¹⁵²⁹

A key aspect of California’s strategy for reducing ACEs and toxic stress by half in a generation is recognition of the toxic stress response as a health condition that

This rigorous scientific framework also provides a strong foundation for policy action to support a cross-sector, systems-level approach.

is amenable to treatment. While not every individual who has experienced ACEs and other risk factors for toxic stress will develop a toxic stress response, improvements in our ability to characterize and, ultimately, confirmatively diagnose and

treat toxic stress have enormous potential to improve health and quality of life, as well as to enhance the effectiveness of programs to support individuals and families living with the legacies of intergenerational adversity and trauma. This rigorous scientific framework also provides a strong foundation for policy action to support a cross-sector, systems-level approach.

California has both learned from the successful efforts of other states and been a pioneer in assembling a suite of policy tools for combating ACEs and toxic stress. Central to coordinating and aligning efforts for primary, secondary and tertiary prevention of ACEs and toxic stress is training and capacity-building for the healthcare sector to enable early detection, evidence-based interventions

and engagement of a network of clinical and community resources to support healing. Key tools and strategies that California has successfully implemented are described below.

TOOLS

Executive Order creating the Office of the California Surgeon General

On January 7, 2019, Governor Gavin Newsom issued Executive Order N-02-19,¹⁵³⁰ creating the Office of the California Surgeon General (CA-OSG). The office was established to advise the Governor, address Californians on matters of public health, and marshal the insights and energy of medical professionals, scientists, public servants, and everyday Californians to find solutions to our most pressing public health challenges. In creating the role of state Surgeon General, Governor Newsom charged and empowered the Surgeon General specifically to tackle “the upstream factors that eventually become chronic and acute conditions that are far more difficult and expensive to treat.”¹⁵³⁰ In doing so, the Governor explicitly highlighted the consensus of scientific evidence pointing to toxic stress as a root cause of many of the most harmful and persistent health challenges facing Californians.

The Governor appointed Nadine Burke Harris, MD, MPH, a pediatrician and expert in the science of ACEs and toxic stress, as California’s first Surgeon General, and together, they established early childhood, health equity, and ACEs and toxic stress as key priorities for her tenure. Dr. Burke Harris set the bold goal of cutting ACEs and toxic stress in California in half in one generation, and the blueprint presented in these pages lays out the coordinated, statewide approach that will achieve that vision.

Dr. Burke Harris’s strategies are guided by evidence disseminated by our nation’s leading scientific bodies, including the National Academies of Sciences, Engineering and Medicine (NASEM) and the CDC. The 2019 NASEM consensus report, *Vibrant and Healthy Kids: Aligning Science, Practice and Policy to Advance Health Equity*, highlighted several key recommendations for preventing and mitigating the effects of toxic stress and advancing health equity, including:²³

“Recommendation 8-2: Adopt and implement screening for trauma and adversities early in life to increase the likelihood of early detection. This should include creating rapid response and referral systems that can quickly bring protective resources to bear when early-life adversities are detected, through the coordination of cross-sector expertise.

Recommendation 8-3: Adopt best practices and implement training for trauma-informed care and

service delivery. Sector leadership should implement trauma-informed systems that are structured to minimize implicit bias and stigma and prevent retraumatization. Standards for trauma-informed practice exist in a variety of service sectors, including health care and social services; those standards should be replicated and implemented across systems.”

Statutory framework supporting screening and provider training

Assembly Bill 340 (Arambula, Chapter 700, Statutes of 2017) established a Trauma Screening Advisory Group to provide recommendations on specific trauma screening tools which could be utilized by Medi-Cal (California’s Medicaid program, see **Appendix B**).¹⁵³¹ The group, composed of staff from the legislature and state departments, as well as experts and stakeholders from pediatrics, mental health, managed care plans, behavioral health, and child welfare, submitted its recommendations in January 2019. It recommended that Medi-Cal providers screen for ACEs, given the extensive evidence for ACEs influencing health over the life course (see **Establishing Causality between ACEs and Poor Health Outcomes**, in Part I, for details). In March 2019, The California Department of Health Care Services (DHCS) selected the Pediatric ACEs and Related Life-Events Screener (PEARLS) tool for children and the ACE Assessment for adults.⁷³⁸

KEY OBJECTIVES OF THE ACEs AWARE INITIATIVE

1. To inform and empower primary care clinicians with the latest evidence on how to recognize, address, and prevent ACEs and toxic stress.
2. To incentivize early detection and early intervention for toxic stress by reimbursing providers for screening for ACEs, which includes assessing for the triad of adversity (ACE score), clinical manifestations of toxic stress (ACE-Associated Health Conditions, AAHCs), and protective factors. The first two components are used in assessing clinical risk for toxic stress and all three help to guide effective responses.
3. To increase awareness and utilization of cross-sectoral, evidence-based and promising clinical and community interventions for preventing and addressing the toxic stress response.
4. To build clinical capacity for screening for—and clinical and cross-sector community capacity for response—to ACEs and toxic stress by investing in clinical quality improvement and community networks for response.
5. To improve clinical outcomes and health equity by enhancing the quality and specificity of healthcare provided to individuals exposed to ACEs and/or at risk for toxic stress, through rigorous, evidence-informed methods.



Figure 26. The spectrum of implementation strategies needed to achieve prevention, practice transformation, and research and innovation in addressing toxic stress. Reproduced with permission from the Center for Youth Wellness¹⁵³²

Conceptual framework establishing the ACEs Aware initiative

Governor Newsom, in partnership with the California legislature, allocated approximately \$143.1 million over two fiscal years (2019-20 and 2020-21) to support routine ACE screening in primary care through Medi-Cal. Of this amount, approximately \$64.7 million was allocated to reimburse providers for performing ACE screening of children and adults (up to age 65) in Medi-Cal. Beginning January 1, 2020, eligible Medi-Cal providers could receive a supplemental payment of \$29 for each eligible screening. Approximately \$78.4 million was allocated to train Medi-Cal providers on how to screen for ACEs in order to assess for risk of toxic stress, and respond with trauma-informed care and evidence-based interventions for toxic stress.

This budget investment effectively created the ACEs Aware initiative, an evidence-guided approach to screening and response in Medi-Cal. This novel clinical and public health effort is jointly administered by CA-OSG and DHCS. The initiative utilizes training and key partnerships to build clinical and cross-sector capacity to identify and respond to ACEs and toxic stress. It aims to empower Medi-Cal primary care providers, leading to practice change, and ultimately, to improve health outcomes by advancing the quality and efficiency of care provided to individuals exposed to ACEs or at risk for toxic stress (**Figure 26**). Beginning in December 2019, the ACEs Aware Initiative offered providers a free, two-hour online training on how to integrate these steps into clinical care. Providers are able to receive free Continuing Medical Education (CME) and Maintenance of Certification (MOC) credits for this training. (For more information, please see the next section, **The ACEs Aware Initiative**.)

Framework for a cross-sector budgetary approach

Central to a national, statewide, or regional approach to reducing ACEs and toxic stress is the integration and coordination of efforts for primary, secondary, and tertiary prevention. The conceptual framework from the *Vibrant and Healthy Kids* consensus report (**Figure 27**) indicates the systems and elements that “set the odds” of adverse or enhanced health and developmental trajectories for individuals and families. A public health approach to preventing and responding to ACEs and toxic stress involves intervention at all levels of prevention and the implementation of several key principles, including:²³

- Intervene early;
- Support caregivers;
- Reform healthcare systems to promote healthy development while ensuring access, quality, and coordination;
- Create stable and supportive early living conditions;

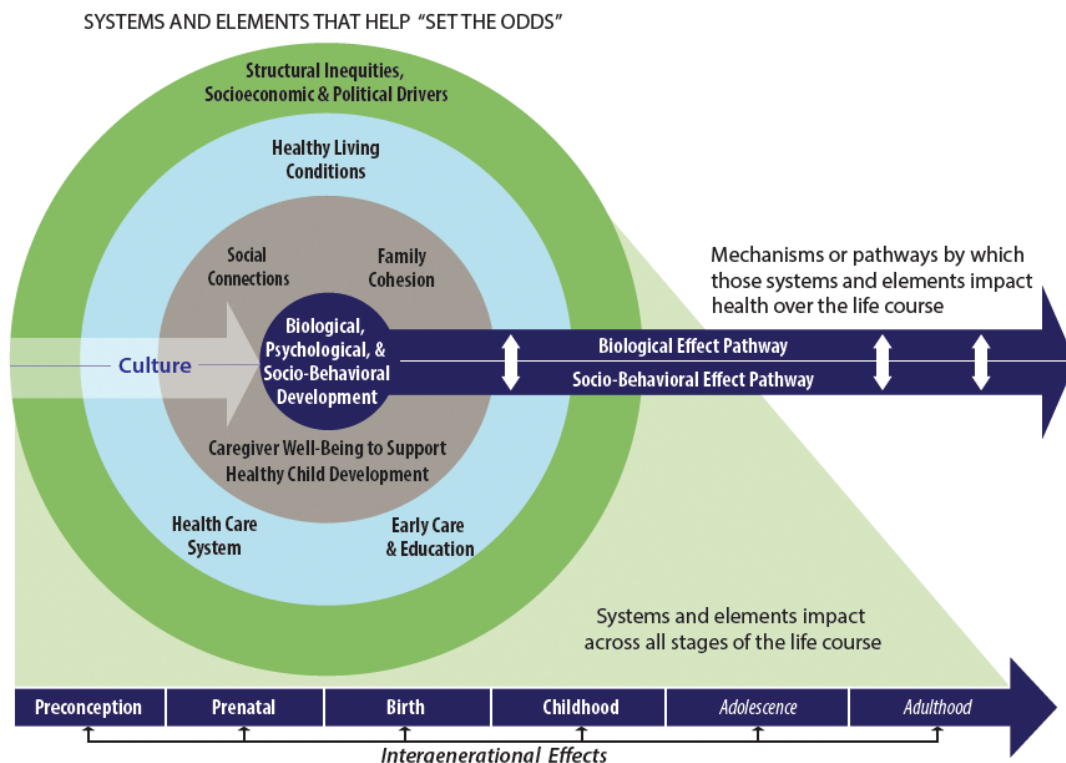


Figure 27. Multi-layered structural and contextual factors that influence life course health. Reproduced with permission from the National Academies of Sciences, Engineering, and Medicine (NASEM, 2019), courtesy of the National Academies Press, Washington, D.C.²³

- Reduce child poverty, food insecurity, and economic insecurity;
- Provide safe and stable housing;
- Eliminate exposure to environmental toxicants;
- Maximize the potential of early care and education to promote healthy outcomes;
- Implement cross-system, trauma-informed initiatives to support children, caregivers, and communities and build a diverse and supported workforce;
- Support cross-sector collaboration and alignment; and
- Integrate and coordinate aligned cross-sector efforts, such as in education, social services, early childhood, justice, public health, and healthcare.

Additionally, the CDC's 2019 report, *Preventing ACEs: Leveraging the Best Available Evidence*, notes the importance of a cross-sector approach to implement the evidence-based strategies for preventing ACEs from occurring and mitigating subsequent harm (Table 9).³¹


 Preventing ACEs	
Strategy	Approach
Strengthen economic supports to families	<ul style="list-style-type: none"> • Strengthening household financial security • Family-friendly work policies
Promote social norms that protect against violence and adversity	<ul style="list-style-type: none"> • Public education campaigns • Legislative approaches to reduce corporal punishment • Bystander approaches • Men and boys as allies in prevention
Ensure a strong start for children	<ul style="list-style-type: none"> • Early childhood home visitation • High-quality child care • Preschool enrichment with family engagement
Teach skills	<ul style="list-style-type: none"> • Social-emotional learning • Safe dating and healthy relationship skill programs • Parenting skills and family relationship approaches
Connect youth to caring adults and activities	<ul style="list-style-type: none"> • Mentoring programs • After-school programs
Intervene to lessen immediate and long-term harms	<ul style="list-style-type: none"> • Enhanced primary care • Victim-centered services • Treatment to lessen the harms of ACEs • Treatment to prevent problem behavior and future involvement in violence • Family-centered treatment for substance use disorders

Table 9. Strategies and approaches to preventing ACEs. Reproduced under public domain from the CDC.³¹

Specific budgetary investments in allied cross-sector work

California has made several key budget investments in cross-sector work that have strengthened supports for children and families, helped them become more resilient, and prevented the incidence and intergenerational transmission of ACEs and toxic stress. These budgetary investments align with several of the NASEM and CDC principles mentioned.^{23,31}

Strengthening economic supports for families

California has strengthened economic supports for children and families through significant state investments and through leveraging federal programs. California increased the Maximum Aid Payment available through the CalWORKs program, a public assistance program that provides cash aid for housing, food, utilities, clothing, or medical services to eligible families with children, including families with caregiver absence, death, or disability.¹¹³¹ The CalWORKS Child Care Program also provides childcare subsidies to help families transition from immediate, short-term child care needs to stable, long-term child care.¹²⁶² Federally funded food assistance programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and CalFRESH (California's Supplemental Nutrition Assistance Program), provide valuable educational and supportive services as well as direct assistance purchasing food. The federal and state Earned Income Tax Credits and the federal Child Tax Credit provide critical economic assistance to families with children. California has also continued to expand the reach of its Paid Family Leave Program, which provides economic support to eligible working families through partial wage replacement benefits.

Supporting parents and children

Home visiting programs offer parents a wide variety of support and services during pregnancy and early childhood. Over the last several years, California has further strengthened these programs by expanding their funding in the 2019 and 2020 Budget Acts, by expanding eligibility beyond first-time parents, and by implementing a wider range of home visiting models.^{1131,1132} California has also expanded the Black Infant Health Program, which provides case-management services to improve Black infant and maternal health (see the section on **Primary, Secondary, and Tertiary Prevention Strategies in Early Childhood**, in Part II, for more details).¹¹³¹

Investments in early learning and care

One way California is strengthening early care and education is by creating the Master Plan for Early Learning and Care and convening the Early Childhood Policy Council. The Master Plan is a long-term strategic plan to provide a series of reports

to inform the advancement of comprehensive, high-quality, and affordable child care and preschool for children from birth through age 12 years, with a particular focus on universal preschool, the workforce, quality, and facilities.¹¹³¹ The Early Childhood Policy Council is an advisory body that includes providers, parents, and state administrative agencies, to provide recommendations to the legislature and the administration on state early learning and care policy.¹¹³¹ The council is chaired by Surgeon General Burke Harris, who is well positioned to ensure that the plan will serve as a critical component of the cross-sector approach to addressing ACEs and toxic stress.

Expansions in healthcare coverage

In addition to embracing the healthcare coverage under the Affordable Care Act, California has further expanded Medi-Cal by expanding the duration of coverage for eligible pregnant women diagnosed with a maternal mental health condition and expanding full-scope Medi-Cal coverage to undocumented young adults age 19 through 25.^{1131,1132}

Research and biomedical advances

Mitigating the harm from existing ACEs and toxic stress is a critical component of treating ACE-Associated Health Conditions and breaking the intergenerational cycle of adversity (see The ACEs Aware Initiative for more details). In 2020, the California Initiative to Advance Precision Medicine issued a request for proposals to provide \$9 million in grants to support precision medicine approaches to advance the assessment and treatment of ACEs and toxic stress.³³⁷

Integration of cross-sector efforts

In addition to the above investments, Part II of this report outlines how the healthcare, public health, social services, early childhood, education, and justice sectors can all contribute to each level of public health prevention, as well as how each of these sectors can advance equity in outcomes. However, in order for these

Cross-sector coordination requires shared language, shared metrics, role clarity, and clear lines of accountability.

efforts to sum to a whole that is greater than its parts, coordination and alignment are required. Cross-sector coordination requires shared language, shared metrics, role clarity, and clear lines of accountability.

California's investments in the ACEs Aware initiative serve to apply the advancing science of ACEs and toxic stress to leverage the current multi-billion dollar

statewide investments in primary, secondary, and tertiary prevention for greater precision and effectiveness. Training for primary care providers to screen and intervene on ACEs and toxic stress provides a necessary foundation to undergird an infrastructure for effective cross-sector coordination, enabling several critical milestones.

- Training primary care providers enables early detection of toxic stress, at a time when interventions are less intensive, less expensive, and more likely to be effective. This allows providers to diagnose and treat patients based on an evidence-based assessment of risk—rather than waiting for patients to manifest the health, mental health, and behavioral consequences of toxic stress, when they are more difficult and more expensive to treat. This early intervention also helps prevent the intergenerational transmission of toxic stress.
- Additionally, increasing the familiarity of clinicians and researchers with ACEs and toxic stress can serve to enlist greater numbers of scientific professionals to develop more effective science-based treatments and interventions for toxic stress and to rigorously evaluate their efficacy, thereby directly advancing the science and clinical management of ACEs and toxic stress.
- Training of healthcare providers is also a critical complement to public education efforts, ensuring that when people learn about ACEs, they can access a provider trained to recognize and respond to the sequelae of ACEs and toxic stress.
- Engaging the healthcare workforce includes deploying practices, tools, and technologies to enable cross-sector coordination through referrals and other interventions.
- Appropriately recognizing toxic stress as a health condition allows all sectors to understand and frame its consequences through that lens. This allows for the adoption of aligned legal, policy, and regulatory frameworks in response. (See [PETER P. VERSUS COMPTON UNIFIED SCHOOL DISTRICT.](#))

STRATEGIES

Engaging cross-sectoral leadership inside and outside of state government

Engaging with leaders both within and outside state government is a critical component of California's broader approach to ACEs. Surgeon General Burke Harris convened an ACEs Reduction Leadership Team with directors of key departments in the Health and Human Services Agency, the California Department

of Corrections and Rehabilitation, the California Department of Education, and the Governor's Office, among others. The team's meetings provided a venue to educate departmental leadership on impacts of ACEs and coordinate existing and new departmental efforts that could reduce or address ACEs and toxic stress.

Dr. Burke Harris also convened the Trauma-Informed Primary Care Implementation Advisory Committee (TIPC), which is composed of representatives of major healthcare plans, health systems, philanthropic associations, nonprofits, local government associations, professional provider associations, and subject matter experts. The TIPC advises on promising models, best practices, evolving science, clinical expertise, and strategies for the implementation of trauma-informed care systems in California. In addition to the full committee, several key subcommittees were created to provide specific guidance on training, clinical implementation, networks of care, and provider engagement efforts.

Assessment and expansion of best practices in trauma-informed, toxic stress-responsive work across sectors

The CA-OSG, the California Department of Public Health, the Strategic Growth Council, and DHCS have implemented two coordinated environmental scans to assess the status of current State and County efforts to prevent and address ACEs and toxic stress across all sectors, and to identify opportunities for future expansion and collaborations. (See **Approach to Environmental Scans of Statewide Trauma-Informed Work**, later in Part III, for more details.)

Trauma-informed, toxic-stress-responsive training enables all front-line providers, such as educators and law enforcement officers, to recognize the symptoms

PETER P. VERSUS COMPTON UNIFIED SCHOOL DISTRICT

Peter P. was a 17-year-old student at Dominguez High School in the Compton Unified School District. According to court filings,¹⁵³³ in the early years of Peter's life, his biological mother abused drugs, and he was repeatedly physically and sexually abused by his mother's boyfriends. He also witnessed the physical abuse of his siblings and mother. He reported having flashbacks and often experienced an instinct to be aggressive when approached by a male. When Peter was roughly five

years old, he and his siblings were removed from the home of their biological mother and entered the foster care system. Peter was initially separated from most of his siblings and moved in and out of a series of foster homes. Peter was occasionally sent back to live with his biological mother for several weeks before being removed from her home again. When Peter was roughly 10 years old, the rights of his biological mother were terminated, and he and several of his

PETER P. VERSUS COMPTON UNIFIED SCHOOL DISTRICT

siblings were adopted. When he was 16, Peter's adoptive mother's health worsened, and he became a caretaker for her and his younger siblings. Peter reported that in middle school, he witnessed his best friend be shot and killed. In 2014, he received stab wounds and required stitches after throwing himself in front of a friend whose relative was attacking her with a knife. Peter reported that he had witnessed more than 20 people get shot. Peter's two older brothers were incarcerated. The man who was living with Peter's mother and serving as a caretaker for him and his siblings when they entered the foster system was also incarcerated for murder. Peter was homeless for two months in March and April 2015. During that period, he slept on the roof of the Dominguez High School cafeteria. According to the court filing, he was never offered support or services. Instead, he was suspended. Although some school personnel were aware of his circumstances, Peter's attempts to return to school were denied, and he was threatened with law enforcement involvement if he persisted in attempting to return.

Peter is one of three student plaintiffs and three teachers represented by Public Counsel, a pro bono law firm, in a lawsuit against Compton Unified School District in Los Angeles, California, filed on May 18, 2015. The lawsuit alleged that the repeated traumatic events experienced by the plaintiffs and other class members

had resulted in health conditions that fit the Americans with Disabilities Act's definition of "individuals with disabilities." Therefore, the plaintiffs argued, the school district was required to provide meaningful access to services, programs, and other benefits to enable the students to learn. The central point in the case rested on the scientific research connecting significant childhood adversity to increased risk for negative health outcomes. The plaintiffs sought to compel the district to employ trauma-informed practices that are research-backed, and proven to help educators support traumatized children and better enable them to learn. On September 29, 2015, the court denied the defendants' motion to dismiss the case, acknowledging that the "allegations that exposure to traumatic events might cause physical or mental impairments that could be cognizable as disabilities under the two Acts" (the Americans with Disabilities Act and the Rehabilitation Act).¹⁵³³ Subsequently, the plaintiff's lawyers and Compton Unified School District officials have met to discuss settling the lawsuit. The lawsuit has been on hold since 2016. But since then, the district has reportedly worked with the plaintiffs' lawyers to address trauma in schools. According to news reports, teachers now get training on trauma-informed practices, and the district has agreed to set up wellness centers in secondary schools to provide mental and physical healthcare to students.

Progress towards incorporating trauma-informed training has been made in various sectors in California state government.

of a dysregulated stress response due to toxic stress so that they can respond with trauma-informed, evidence-based principles, rather than escalate the encounter, for instance, through harsh

punitive measures. Such training also benefits the front-line providers themselves, by enabling them to recognize signs of their own stress responses being activated and to regulate those responses through practicing evidence-based interventions. Progress towards incorporating trauma-informed training has been made in various sectors in California state government, including the Department of Social Services, the Department of Public Health, the Department of Education, and the Commission on Peace Officer Standards and Training. However, these trainings may not use standardized language, definitions, or guidelines. CA-OSG continues to look for opportunities to engage leading experts to incorporate the latest evidence, enabling further coordination and standardization of training, as well as expansion of existing efforts.

Increasing public awareness

Increasing public awareness and understanding of ACEs and toxic stress is a critical means to provide all sectors and the general public shared language, validate individuals' experiences, and promote resilience-building or toxic stress buffering interventions. Past public education campaigns have been effective at reducing the prevalence of health conditions and risk factors, including smoking, lead poisoning, and motor vehicle deaths (see **Primary, Secondary, and Tertiary Prevention Strategies in Public Health**, in Part II, for details). Public health campaigns are most effective when partnered with public policy efforts such as those limiting indoor use of tobacco products, restricting use of lead in industrial products, or requiring seat belt use. The World Health Organization outlines six major principles for effective communications: they should be accessible, actionable, credible, relevant, timely, and understandable.¹⁵³⁴ Under this framework, knowledge of the audience, incorporation of feedback from that audience, and tailoring the message appropriately, are critical. A public education campaign on ACEs and toxic stress should:

1. Explain what ACEs and toxic stress are, how common they are, and how they impact health and well-being;
2. Highlight the structural and systemic conditions that can make ACEs and toxic stress more or less likely to occur; and
3. Offer strong messages of hope, including practical strategies for buffering

factors and scaffolding protective factors that can improve outcomes for a child or adult at risk for or experiencing toxic stress, to prevent further harm, and how to break the intergenerational cycle of adversity.

Paid media and earned media, including social media, and engaging champions, trusted messengers, and spokespersons to raise the awareness of ACEs and toxic stress and how to heal from them are all strategies that can be deployed.