

From Adversity to Resilience in the Justice Sector



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

How Adversity Can Impact Justice Outcomes

Recent estimates suggest that **62%** of California adults have experienced at least one **Adverse Childhood Experience (ACE)**, and **16%** have experienced four or more (2011-2017 data).¹ A key mechanism by which ACEs increase risk for negative health, behavioral, and social outcomes is through biological changes known as the **toxic stress response**, which is defined by the National Academies of Sciences, Engineering, and Medicine as “prolonged activation of the stress response systems that can disrupt the development of brain architecture and other organ systems, and increase the risk

Data suggest that more than 90% of incarcerated adults have experienced at least one ACE and almost 50% have experienced four or more

for stress-related disease and cognitive impairment, well into the adult years.”^{2,3} In a dose-response fashion, ACEs can lead to serious health risks, such as heart disease, stroke, cancer, dementia, mental health and substance use disorders, and premature mortality, including by suicide.⁴⁻¹⁴

Research reveals a very high prevalence of ACEs among incarcerated populations, demonstrating dose-response relationships between ACEs and juvenile and adulthood arrest, felony charges, and incarceration.¹⁵⁻¹⁷ One study found that half of incarcerated youth had experienced four or more ACEs,¹⁸ while combined data from the United States and Wales suggest that more than 90% of incarcerated adults have experienced at least one ACE and almost 50% have experienced four or more.¹⁹⁻²¹

While most individuals with significant ACEs do not encounter the criminal justice system, exposure to ACEs is a well-documented risk factor for justice involvement, which may be an important indicator of severe and untreated toxic stress. This increased risk is mediated through a complex interaction of biological and social factors, including biological susceptibility, family and social supports, income, race, education, and access to treatment services. The neurobiological impact of trauma begins before birth and contributes to what is known as the “cradle-to-prison pipeline.”²² Cumulative adversity is also associated with poorer educational and social outcomes, including learning, developmental, and behavior problems, high school noncompletion, unemployment, low life satisfaction, and poverty—many of which increase risk of incarceration and also serve to transmit adversity to the next generation.^{4,9,15-17,23-25} Many ACE-Associated Health Conditions, including substance dependence, school failure, and mental illness, predispose for exposure to the justice system and risk of incarceration.²⁶⁻²⁸ ACEs and other adversities are also, in and of themselves, risk factors for juvenile and adulthood arrest, felony charges, and incarceration.¹⁵⁻¹⁷

There also exist striking disparities by race/ethnicity, gender, and income in terms of who ends up in the criminal justice system, and those disparities deserve continued attention. Bias in policing practices can lead to negative health impacts for Black, Indigenous, and other people of color.²⁹⁻³⁵

The Role of the Justice Sector in Preventing and Mitigating Toxic Stress

Preventing entry into the justice system for youth and young adults who have had ACEs and other adversities is the first point of prevention. Reducing the impacts of the “school-to-prison pipeline” through restorative justice practices, promoting healthy school climate, and targeted supportive interventions for at-risk youth is a worthy goal.^{36,37}

Encounters with law enforcement and the justice system are intrinsically stressful and potentially traumatic, especially for at-risk populations such as youth who have experienced ACEs.³⁸ Training in trauma-informed approaches for everyone working in the justice system—from first responders and court employees to peace officers and probation officers—may mitigate stress, trauma, and retraumatization. Alternatives to traditional justice proceedings and incarceration, such as restorative justice programs, aim to prevent additional traumas and maintain community support.



In addition, fostering the health and well-being of staff who are charged with the care of those involved in the justice system is a critical component of trauma-informed justice practices, as many workers have experienced their own ACEs and also experience high levels of stress in their jobs. This is especially true among justice-sector employees such as police officers, social workers, and probation officers, who experience trauma, vicarious trauma, and burnout at very high rates.

Providing proper preventive and treatment-oriented physical and mental health care while an individual is justice-involved or incarcerated results in lower rates of delinquency and recidivism, higher employment, better social functioning, and other positive outcomes.³⁹⁻⁴⁵ Programs that are comprehensive and consider the medical, educational, vocational, and psychosocial needs of individuals and their families upon release encourage rehabilitation and recovery.¹⁸ Justice system personnel may connect individuals in need with a local healthcare provider trained in ACE screening, identifying signs and symptoms of toxic stress, and trauma-informed care through the [ACEs Aware provider directory](#).⁴⁶



Justice Sector Strategies for Preventing and Addressing ACEs and Toxic Stress



Primary Prevention Strategies

*These actions focus on reducing the total dose of adversity, including preventing **any** exposure to the justice system, and increasing the total dose of buffering factors.*

Secondary Prevention Strategies

These actions aim to minimize additional toxic stress for justice-involved people to minimize future involvement with the justice system and prevent further toxic stress during current encounters.

Tertiary Prevention Strategies

These actions aim to lessen the effects of toxic stress in people under the care of the justice system and ensure continuing supports following release.



Primary Prevention Strategies

- ▶ Reducing the school-to-prison pipeline
- ▶ Limiting zero-tolerance policies
- ▶ Improving school connectedness, community sources of resilience
- ▶ Preventing children from entering adult criminal courts
- ▶ Increasing police accountability
- ▶ Ensuring youth access to counsel
- ▶ Ending mandatory minimum sentences
- ▶ Increasing the age of “youth offender parole”
- ▶ Providing trauma-informed training for all justice personnel
- ▶ Supporting well-being among justice-sector personnel
- ▶ Improving access to preventive healthcare

Secondary Prevention Strategies

- ▶ Training correctional staff in trauma-informed justice practices
- ▶ Implementing Neighborhood Courts and other restorative justice practices
- ▶ Offering pretrial diversion programs
- ▶ Alternative sentencing options, such as home monitoring, drug courts, and mental health courts that connect individuals to needed services
- ▶ Implementing initiatives that reduce and address the impacts of childhood adversity and toxic stress



Tertiary Prevention Strategies

- ▶ Providing preventative and treatment-oriented physical and mental healthcare for justice-involved or incarcerated individuals
- ▶ Providing trauma-informed assessment and care in justice services
- ▶ Re-entry programs that address past adversity and support reintegration into the community

References

1. California Department of Public Health, Injury and Violence Prevention Branch (CDPH/IVPB), California Department of Social Services, Office of Child Abuse Prevention, California Essentials for Childhood Initiative, University of California Davis, Violence Prevention Research Program, Firearm Violence Research Center. Adverse Childhood Experiences data report: Behavioral Risk Factor Surveillance System (BRFSS), 2011-2017: An overview of Adverse Childhood Experiences in California. California: California Department of Public Health and the California Department of Social Services, 2020.
2. Bucci M, Marques SS, Oh D, Harris NB. Toxic stress in children and adolescents. *Advances in Pediatrics* 2016; **63**(1): 403-28.
3. National Academies of Sciences, Engineering, and Medicine. Vibrant and healthy kids: Aligning science, practice, and policy to advance health equity. Washington, DC: The National Academies Press, 2019.
4. Hughes K, Bellis MA, Hardcastle KA, et al. The effect of multiple Adverse Childhood Experiences on health: A systematic review and meta-analysis. *The Lancet Public Health* 2017; **2**(8): e356-e66.
5. Petruccelli K, Davis J, Berman T. Adverse Childhood Experiences and associated health outcomes: A systematic review and meta-analysis. *Child Abuse & Neglect* 2019; **97**: 104127.
6. Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine* 1998; **14**(4): 245-58.
7. Dube SR, Felitti VJ, Dong M, Giles WH, Anda RF. The impact of Adverse Childhood Experiences on health problems: Evidence from four birth cohorts dating back to 1900. *Preventive Medicine* 2003; **37**(3): 268-77.
8. Brown DW, Anda RF, Tiemeier H, et al. Adverse Childhood Experiences and the risk of premature mortality. *American Journal of Preventive Medicine* 2009; **37**(5): 389-96.



9. Merrick MT, Ford DC, Ports KA, et al. Vital signs: Estimated proportion of adult health problems attributable to Adverse Childhood Experiences and implications for prevention—25 states, 2015–2017. *Morbidity and Mortality Weekly Report* 2019; **68**(44).
10. Waehrer GM, Miller TR, Silverio Marques SC, Oh DL, Burke Harris N. Disease burden of Adverse Childhood Experiences across 14 states. *PLoS One* 2020; **15**(1): e0226134.
11. Centers for Disease Control and Prevention. Leading causes of death and injury—ten leading causes of death and injury, United States, 2017. <https://www.cdc.gov/injury/wisqars/LeadingCauses.html> (accessed Sep 15, 2020).
12. Bellis MA, Hughes K, Ford K, Ramos Rodriguez G, Sethi D, Passmore J. Life course health consequences and associated annual costs of Adverse Childhood Experiences across Europe and North America: A systematic review and meta-analysis. *The Lancet Public Health* 2019; **4**(10): e517–e28.
13. Miller TR, Waehrer GM, Oh DL, et al. Adult health burden and costs in California during 2013 associated with prior Adverse Childhood Experiences. *PLoS One* 2020; **15**(1): e0228019.
14. Anda RF, Felitti VJ, Bremner JD, et al. The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience* 2006; **256**(3): 174–86.
15. Jäggi LJ, Mezuk B, Watkins DC, Jackson JS. The relationship between trauma, arrest, and incarceration history among Black Americans: Findings from the National Survey of American Life. *Society and Mental Health* 2016; **6**(3): 187–206.
16. Giovanelli A, Reynolds AJ, Mondì CF, Ou S-R. Adverse Childhood Experiences and adult well-being in a low-income, urban cohort. *Pediatrics* 2016; **137**(4): e20154016.
17. Metzler M, Merrick MT, Klevens J, Ports KA, Ford DC. Adverse Childhood Experiences and life opportunities: Shifting the narrative. *Children and Youth Services Review* 2017; **72**: 141–9.
18. Fox BH, Perez N, Cass E, Baglivio MT, Epps N. Trauma changes everything: Examining the relationship between Adverse Childhood Experiences and serious, violent and chronic juvenile offenders. *Child Abuse & Neglect* 2015; **46**: 163–73.
19. Skarupski KA, Parisi JM, Thorpe R, Tanner E, Gross D. The association of Adverse Childhood Experiences with mid-life depressive symptoms and quality of life among incarcerated males: Exploring multiple mediation. *Aging & Mental Health* 2016; **20**(6): 655–66.
20. Ford K, Barton E, Newbury A, et al. Understanding the prevalence of Adverse Childhood Experiences (ACEs) in a male offender population in Wales: The Prisoner ACE Survey, 2019.



21. Heard-Garris N, Sacotte KA, Winkelman TNA, et al. Association of childhood history of parental incarceration and juvenile justice involvement with mental health in early adulthood. *JAMA Network Open* 2019; **2**(9): e1910465.
22. McCarter S. The school-to-prison pipeline: A primer for social workers. *Social Work* 2016; **62**(1): 53-61.
23. Cheng TL, Johnson SB, Goodman E. Breaking the intergenerational cycle of disadvantage: The three generation approach. *Pediatrics* 2016; **137**(6).
24. Burke NJ, Hellman JL, Scott BG, Weems CF, Carrion VG. The impact of Adverse Childhood Experiences on an urban pediatric population. *Child Abuse & Neglect* 2011; **35**(6): 408-13.
25. Center for Youth Wellness. A hidden crisis: Findings on Adverse Childhood Experiences in California: Center for Youth Wellness, 2014.
26. Covin L. Homelessness, poverty, and incarceration: The criminalization of despair. *Journal of Forensic Psychology Practice* 2012; **12**(5): 439-56.
27. Feierman J, Levick M, Mody A. The school-to-prison pipeline... and back: Obstacles and remedies for the re-enrollment of adjudicated youth. *New York Law School Law Review* 2009; **54**(4): 1115-29.
28. Luciano A, Belstock J, Malmberg P, et al. Predictors of incarceration among urban adults with co-occurring severe mental illness and a substance use disorder. *Psychiatric Services* 2014; **65**(11): 1325-31.
29. Edwards F, Lee H, Esposito M. Risk of being killed by police use of force in the United States by age, race-ethnicity, and sex. *Proceedings of the National Academy of Sciences* 2019; **116**(34): 16793-8.
30. Alang S, McAlpine D, McCreedy E, Hardeman R. Police brutality and Black health: Setting the agenda for public health scholars. *American Journal of Public Health* 2017; **107**(5): 662-5.
31. Buehler JW. Racial/ethnic disparities in the use of lethal force by US police, 2010-2014. *American Journal of Public Health* 2017; **107**(2): 295-7.
32. McLeod MN, Heller D, Manze MG, Echeverria SE. Police interactions and the mental health of Black Americans: A systematic review. *Journal of Racial and Ethnic Health Disparities* 2020; **7**(1): 10-27.
33. Sewell AA, Jefferson KA, Lee H. Living under surveillance: Gender, psychological distress, and stop-question-and-frisk policing in New York City. *Social Science & Medicine* 2016; **159**: 1-13.
34. Bower KM, Geller RJ, Perrin NA, Alhusen J. Experiences of racism and preterm birth: Findings from a pregnancy risk assessment monitoring system, 2004 through 2012. *Women's Health Issues* 2018; **28**(6): 495-501.
35. Ruiz RL, Shah MK, Lewis ML, Theall KP. Perceived access to health services and provider information and adverse birth outcomes: Findings from LaPRAMS, 2007-2008. *Southern Medical Journal* 2014; **107**(3): 137-43.



36. Dorado JS, Martinez M, McArthur LE, Leibovitz T. Healthy Environments and Response to Trauma in Schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health* 2016; **8**(1): 163-76.
37. Skiba RJ, Arredondo MI, Williams NT. More than a metaphor: The contribution of exclusionary discipline to a school-to-prison pipeline. *Equity & Excellence in Education* 2014; **47**(4): 546-64.
38. Parker A, Scantlebury A, Booth A, et al. Interagency collaboration models for people with mental ill health in contact with the police: A systematic scoping review. *BMJ Open* 2018; **8**(3): e019312.
39. Cary M, Butler S, Baruch G, Hickey N, Byford S. Economic evaluation of multisystemic therapy for young people at risk for continuing criminal activity in the UK. *PLoS One* 2013; **8**(4): e61070.
40. D'Amico EJ, Hunter SB, Miles JNV, Ewing BA, Osilla KC. A randomized controlled trial of a group motivational interviewing intervention for adolescents with a first time alcohol or drug offense. *Journal of Substance Abuse Treatment* 2013; **45**(5): 400-8.
41. Himelstein S, Hastings A, Shapiro S, Heery M. A qualitative investigation of the experience of a mindfulness-based intervention with incarcerated adolescents. *Child and Adolescent Mental Health* 2012; **17**(4): 231-7.
42. Himelstein S, Saul S, Garcia-Romeu A, Pinedo D. Mindfulness training as an intervention for substance user incarcerated adolescents: A pilot grounded theory study. *Substance Use & Misuse* 2014; **49**(5): 560-70.
43. Sundell K, Hansson K, Löfholm CA, Olsson T, Gustle LH, Kadesjö C. The transportability of multisystemic therapy to Sweden: Short-term results from a randomized trial of conduct-disordered youths. *Journey of Family Psychology* 2008; **22**(4): 550-60.
44. Tighe A, Pistrang N, Casdagli L, Baruch G, Butler S. Multisystemic therapy for young offenders: Families' experiences of therapeutic processes and outcomes. *Journey of Family Psychology* 2012; **26**(2): 187-97.
45. Young S, Greer B, Church R. Juvenile delinquency, welfare, justice and therapeutic interventions: A global perspective. *BJPsych Bulletin* 2017; **41**(1): 21-9.
46. ACEs Aware. Find ACEs Aware providers in California. 2020. <https://www.acesaware.org/screen/certification-payment/provider-directory/> (accessed Oct 9, 2020).

