

# Adverse Childhood Experiences

## HCRC Fact Brief

Decades of research have indicated that physical and mental health problems in adulthood can be traced to negative environmental influences in childhood.<sup>1,2</sup> A specific cluster of these influences have widely come to be termed Adverse Childhood Experiences (ACEs).

### Prior research on ACEs and adult outcomes

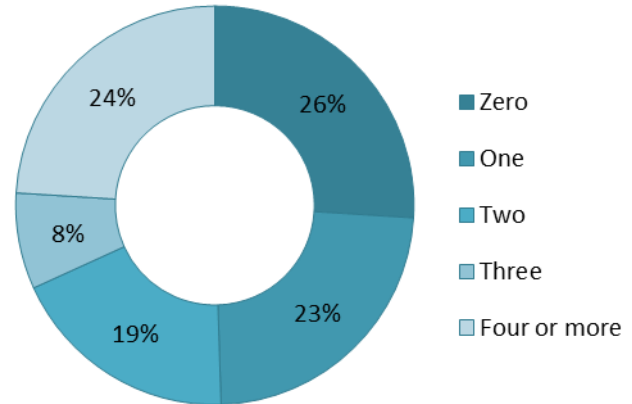
Cumulative ACEs are associated with many deleterious physical and mental health outcomes.<sup>2,3</sup> In the Adverse Childhood Experiences Study, researchers at Kaiser Permanente and the Center for Disease Control reported that rates of substance abuse, obesity, depression, chronic lung disease, and heart disease increased in a graded fashion as the number of self-reported ACEs increased.<sup>1</sup>

### HCRC research on ACEs and adult outcomes

There is increasing evidence that ACEs predict disparities in educational, socioeconomic, and crime outcomes, as well. In the Chicago Longitudinal Study, which tracks the development of a large cohort of low-income, minority individuals, nearly two-thirds of the study sample experienced one or more ACEs by age 18.<sup>4</sup> After controlling for demographic factors and early

## How Common are ACEs?

Chicago Longitudinal Study Sample



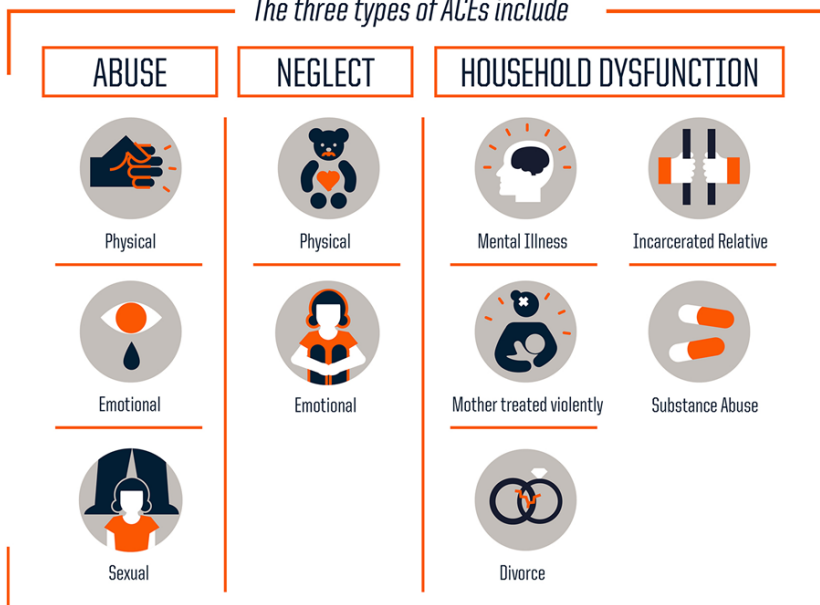
intervention status, individuals reporting ACEs were significantly more likely to exhibit poor outcomes than those with no ACEs (see graph to the right).

### Early intervention for ACE-affected children and future directions

Early childhood interventions and education programs may facilitate healthy development among ACE-affected children. These programs promote lifelong well-being by reducing family stress and exposure to adversity and by promoting children's school readiness, achievement, and socio-emotional learning.<sup>5,6,7</sup>

Unfortunately, only one-third of young children nationally are enrolled in publicly-funded preschool programs, and even fewer are in intensive programs that have been linked to long-term benefits for high-risk children.<sup>8,9</sup> Increasing access to high-quality early childhood programming is an important priority for promoting healthy development among ACE-affected children.

*The three types of ACEs include*



Courtesy of Robert Wood Johnson Foundation

Interventions would be strengthened by deeper understanding of the specific ACEs, risk, and protective factors facing different populations. For example, research has shown that individuals living in poverty, as well as those from racial/ethnic minority backgrounds, face unique ACEs, as well as other risk factors that may exacerbate the negative effects of ACEs.<sup>10,11,12</sup>

Future research is needed to understand the unique ACEs, risk and protective factors for these populations. This work is underway with the Chicago Longitudinal Study cohort, and may inform future efforts to reduce the incidence of ACEs and to mitigate their negative effects.

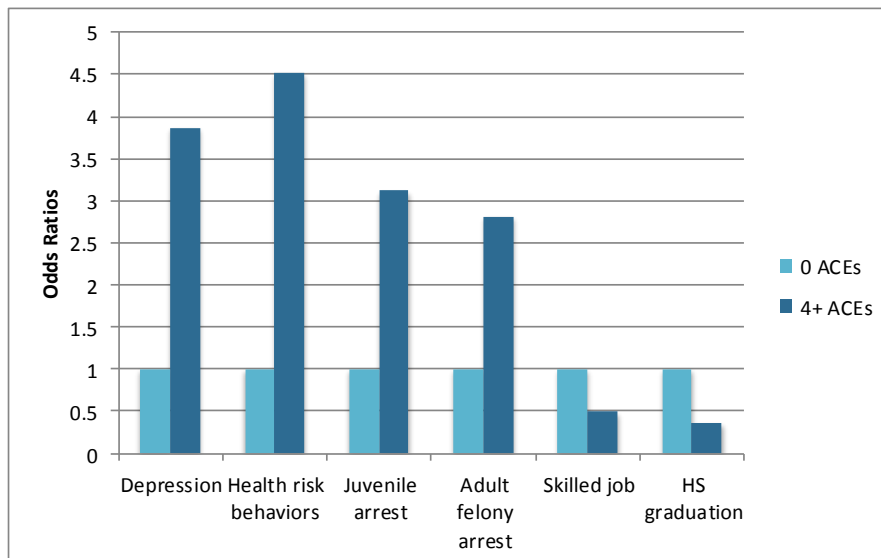
### Practical recommendations

#### Prevention

- Doctors, schools, and other agencies should do universal ACE screenings. This would allow them to identify the common risk and protective factors in the populations that they serve, and to respond accordingly to lower the incidence of ACEs.
- Efforts should be made to educate the public about the concept of ACEs, and to promote relevant support services.

#### Intervention

- Doctors offices, agencies, and schools should have a protocol for offering support and interventions for children and adults who have been identified through universal



ACE screenings as being high risk for negative outcomes (e.g., education on what ACEs are, social services, ongoing counseling).

- Doctors and schools should regularly follow up with children with high ACE scores, and assess their functioning in multiple domains (e.g., physical and mental health, academic achievement, health compromising behaviors.) Targeted support services should be offered as needed.
- Federal and state funding to high-quality early intervention and education programs should be increased, particularly in high-poverty areas (see discussion above).

#### Additional resources for practitioners:

[www.cdc.gov/violenceprevention/acestudy](http://www.cdc.gov/violenceprevention/acestudy)

[www.pcamn.org/adverse-childhood-experiences/#](http://www.pcamn.org/adverse-childhood-experiences/#)

#### References

- 1 Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., ... & Marks, J. S. (1998). 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*, 14(4), 245-258.
- 2 Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. *JAMA*, 301(21), 2252-2259.
- 3 Perry, B. D., & Pollard, R. (1998). Homeostasis, stress, trauma, and adaptation: A neurodevelopmental view of childhood trauma. *Child and Adolescent Psychiatric Clinics of North America*.
- 4 Giovanelli, A., Reynolds, A. J., Mondri, C. F., & Ou, S. R. (2016). Adverse childhood experiences and adult well-being in a low-income, urban cohort. *Pediatrics*.
- 5 Karoly, L. A., Kilburn, M. R., & Cannon, J. S. (2006). *Early childhood interventions: Proven results, future promise*. Rand Corporation.
- 6 Reynolds, A. J., Richardson, B. A., Hayakawa, M., Lease, E. M., Warner-Richter, M., Englund, M. M., ... & Sullivan, M. (2014). Association of a full-day vs part-day preschool intervention with school readiness, attendance, and parent involvement. *JAMA*, 312(20), 2126-2134.
- 7 Nurius, P. S., Green, S., Logan-Greene, P., & Borja, S. (2015). Life course pathways of adverse childhood experiences toward adult psychological well-being: a stress process analysis. *Child Abuse & Neglect*, 45, 143-153.
- 8 Bethell, C. D., Newacheck, P., Hawes, E., & Halfon, N. (2014). Adverse childhood experiences: assessing the impact on health and school engagement and the mitigating role of resilience. *Health Affairs*, 33(12), 2106-2115.
- 9 Barnett, W.S., Carolan, M.E., Fitzgerald, J., & Squires, J.H. (2015). *The state of preschool 2014: State preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research.
- 10 Odgers, C. L., & Jaffee, S. R. (2013). Routine versus catastrophic influences on the developing child. *Annual Review of Public Health*, 34, 29.
- 11 Williams, D. R., & Jackson, P. B. (2005). Social sources of racial disparities in health. *Health Affairs*, 24(2), 325-334.
- 12 Brooks-Gunn, J., Duncan, G. J., Klebanov, P. K., & Sealand, N. (1993). Do neighborhoods influence child and adolescent development? *American Journal of Sociology*, 353-395.