# Health Brief: ACEs for Health Systems and Providers

## The Illinois ACEs Response Collaborative

Health & Medicine POLICY RESEARCH GROUP

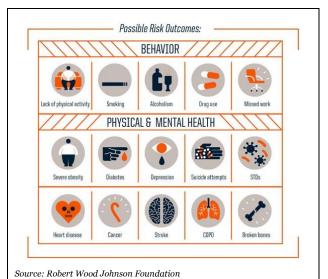
# **Executive Summary**

Adverse childhood experiences (ACEs) of abuse, neglect and family dysfunction between birth and age 18 are a root cause of many of society's most pressing health problems that contribute to the high costs of health care as well as tremendous social costs in morbidity, mortality and quality of life. However, exposure to ACEs can be mitigated by socalled "protective" factors that foster resilience, and this Policy Brief will outline policy recommendations so that systems can nurture resilience and improve health and life outcomes for individuals facing serious adversity.<sup>1</sup>

## Introduction

The CDC's 1989 Adverse Childhood Experiences Study demonstrated a striking link between childhood trauma and the chronic diseases and socio-emotional problems people develop as adults.<sup>2</sup> The ACE study measured 10 types of trauma, each of which counts as one point in an individual's ACE score. The higher a person's ACE score, the more likely they are to develop poor health behaviors and outcomes according to the study. These outcomes include heart disease, lung cancer, diabetes, many autoimmune diseases, depression, violence, drug abuse, being a victim of violence, and suicide. Furthermore, risk behaviors correlating with ACEs in parents often become ACEs for the next generation. <sup>3,4,5</sup> The original definition of an ACE has been expanded since the original study to include other types of trauma such as being a victim of extreme discrimination (racism, homophobia), a victim or witness to community violence or war, being a refugee or experiencing severe social deprivation including poverty, hunger and homelessness.6

However, protective factors both within an individual and their surroundings can mitigate the effects of adversity and make that child more likely to thrive. Additionally, the effects and multigenerational transmission of ACEs can be prevented and/or ameliorated through a variety of methods both within the community and by the health care system.



# The Impact of ACEs on Health

## **Chronic Health Conditions:**

- 25% of the risk of getting heart disease or cancer (diseases which account for 48% of all deaths) is attributable to ACEs. <sup>7, 8</sup> The total costs of heart disease and stroke in 2010 were estimated at \$315.4 billion.
- Individuals with four or more ACEs were twice as likely to be diagnosed with cancer. In 2010, cancer care cost \$157 billion.
- 29.2% of children with one or more ACE reported asthma, twice the number of children with zero ACEs.<sup>9</sup>

- Each additional ACE score increases the risk of being hospitalized with an autoimmune disease.<sup>10</sup>
- There is a link between ACEs and obesity for about 8% of patients, or six million people.<sup>11</sup> In 2010, annual health costs related to obesity in the U.S. were nearly \$200 billion; nearly 21% of medical costs in the U.S. can be attributed to obesity.<sup>12</sup>

## Smoking:

 Smoking-related illness in the United States costs more than \$300 billion each year, including nearly \$170 billion for direct medical care for adults, and more than \$156 billion in lost productivity, including \$5.6 billion in lost productivity due to secondhand smoke exposure.<sup>13</sup>

# Behavioral Health (mental health and substance use):

- Someone with an ACE score of four is 460 % more likely to suffer from depression than someone with an ACE score of zero.<sup>1</sup>
- 16.3 million adults had an alcohol use disorder in 2014.<sup>14</sup> The economic toll of alcohol use disorder was estimated to be \$223.5 billion in 2006.
- An ACE score of three increases the risk of IV drug use by 93%.<sup>15</sup> Health care costs associated with drug dependency were \$11 billion dollars in 2016<sup>16</sup>.
- Illegal drug use accounts for \$181 billion in health care, productivity loss, crime, incarceration and drug enforcement, which includes \$11 billion in health care costs alone.<sup>17</sup>
- National costs associated with serious mental illness are estimated to be in excess of \$300 billion.<sup>18</sup>

## Violence:

- Adverse childhood experiences increase risks for first and subsequent incidents of violence as either a victim or perpetrator.<sup>19</sup> A man with an ACE score of four is 400% more likely to be a perpetrator of domestic violence than a man with an ACE score of zero.<sup>20</sup>
- Women who have experienced five or more ACEs are three times more likely than women who have

experienced zero ACEs to be victims of domestic violence as adults. <sup>19</sup>

• People who have experienced four or more ACEs are eight times more likely to experience sexual assault than those with no ACEs.<sup>21</sup>

## The Cost of Doing Nothing:

 The Illinois Chronic Disease Cost Calculator estimates there will be a 60.3 % increase in medical costs, excluding absenteeism, in Illinois by 2020.<sup>22</sup>

## **Policy Recommendations**

Small "p" policy changes within local systems and agencies can have an important impact on the people served, but large "P" policy at the federal, state and local levels will build the foundation for preventing and addressing ACEs in a systematic "upstream" approach. The following recommendations reflect an understanding of ACEs and trauma which requires multiple levels of policy change since effectively addressing ACEs requires working within all the contexts in which they occur: families, communities and society.

#### Policy Recommendations at a Glance

Increase awareness of ACEs and resilience, particularly among policy makers and providers.

Support federal and state policy that supports families and communities, such as paid sick time and universal day care.

Fund a wide array of family supports especially early childhood programs, including home visiting, so families can thrive.

Equip providers and systems with tools to screen for and address ACEs and develop trauma-sensitive health care systems that support patients and staff.

Use BRFSS data and proxies for high ACE scores to focus services in high-need geographic areas.

Utilize an ACE and trauma-informed framework in planning, funding and implementing services.

Develop innovative plans for use of health care expenditures by institutions and government for trauma-informed practices such as universal coverage for services and programs that help to prevent and treat ACEs/trauma.

#### **Governmental Policy**

- Equip policy makers with information about ACEs, trauma and the impact of toxic stress so that governmental policy is responsive to the need and opportunity to treat ACEs.
- Support federal and state social policy that supports families and communities, such as paid sick time and universal day care.
- Provide universal health insurance so that everyone has access to necessary health care.
- Expand workforce laws and coverage in Illinois to support community health workers embedded in communities most affected by toxic stress.
- Fund early childhood education, including home visiting, and start supporting *whole* families from the prenatal period continuing throughout the life course.
- Fund a wide array of family supports so that families can thrive.

## **Systems Level Changes**

- Strengthen the safety net to better meet needs for food, shelter, literacy, employment, training and health care as such supports help prevent and mitigate ACEs.
- Increase awareness of ACEs and the importance of building resilience across physical and behavioral health disciplines at every level of health care organizations.
- Equip providers and the systems they work in with tools to screen for and address social determinants of health *and* adverse experiences.
- Develop trauma-sensitive health care systems that prevent, recognize, mitigate and treat ACEs/trauma in patients and staff.
- Encourage the use of hospital charity care dollars to be directed toward meeting social resource needs that directly affect the ability of individuals and families to heal and flourish.

## **Program Changes**

- Use BRFSS data and proxies for high ACE scores to focus services in high-need geographic areas.
- Utilize an ACE and trauma-informed framework in planning, funding and implementing services

for substance use and mental health disorders to assure that the etiology of these conditions is addressed.

- Increase funding for home visiting/parenting programs which have demonstrated effectiveness in reducing occurrence and impact of ACEs.
- Increase funding for evidence-based programs that prevent and address abuse, violence, and injury prevention, noting the enormous return on investment based on program evaluation.

## **Payment and Reimbursement Changes**

- Develop innovative plans for use of health care expenditures by institutions and government for trauma-informed practices such as universal coverage for services and programs that help to prevent and treat the consequences of ACEs/trauma by strengthening the dyad (parentchild) relationship through active coaching of parenting skills and healing/strengthening the brain and body through teaching self-regulation skills to patients and health care workers.
- Build incentives into healthcare quality measures and reimbursement systems including Medicare and Medicaid to encourage or mandate training, development of trauma-sensitive health care systems and, ultimately, universal screening and implementation of comprehensive treatment plans.
- Explore federal waiver and state options to reduce healthcare costs and integrate behavioral health, housing support and community based services in Illinois (similar to the Washington State 1115 Medicaid waiver submitted in October 2016) to address social determinants of health.

#### About Health & Medicine Policy Research Group

Health & Medicine is a Chicago based non-profit working to improve the health of all people in Illinois by promoting health equity. Founded in 1981 by Dr. Quentin Young, it was formed as an action-oriented policy center—nimble, independent, and focused on regional health issues. Health & Medicine's mission is to promote social justice and challenge inequities in health and health care. It conducts research, educates and collaborates with other groups to advocate policies and impact health systems to improve the health status of all people. Health & Medicine has successfully developed health policy recommendations and implementation strategies for different public and private entities, earning the trust of the legislature, advocates, the media, researchers and policymakers at all levels of government in Illinois to become the region's "honest broker" on healthcare policy matters. Learn more at <a href="https://www.hmprg.org">www.hmprg.org</a>.

## About the Illinois ACEs Response Collaborative

Established in 2011, the <u>Illinois ACEs Response Collaborative</u> (the Collaborative) represents a broad range of organizations and agencies committed to expanding and deepening the understanding of the impact of childhood trauma and ACEs on the health and well-being of Illinois families and communities. The Collaborative works to develop education, policies, and responses to assist those who have experienced a high level of adversity, while simultaneously developing strategies to reduce the frequency and impact of ACEs as well as preventing their transmission to the next generation.

This policy brief and the work of the Collaborative is made possible by the Illinois Children's Healthcare Foundation and the Health Federation of Philadelphia. For more information, contact us at 312.372.4292 or <u>info@hmprg.org</u>, or visit hmprg.org.

## Endnotes

<sup>1</sup> 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. Am J Prev Med. 1998;14(4):245–258. [PubMed]

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<sup>15</sup> The Central Iowa ACEs Steering Committee. (2016). Retrieved from <u>www.iowaaces360.org</u>

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