

# URGENT, RELATED, PREVENTABLE:

## Adverse Childhood Experiences, Overdose, and Suicide

Adverse childhood experiences (ACEs), overdose, and suicide are urgent and related public health challenges that have consequences for all of us. But these challenges are preventable if we adopt a coordinated approach that focuses on addressing today's crises while preventing tomorrow's.

### ADVERSE CHILDHOOD EXPERIENCES

- Adverse childhood experiences refers to potentially traumatic events that occur to people under the age of 18. ACEs may include but is not limited to exposure to abuse, neglect, parental substance use, violence in the home and community, and racism.<sup>1</sup>
- One-third of all children in the U.S. (and 61% of adults) have experienced at least one adverse childhood experience in their lifetime<sup>2</sup> and almost 16% of adults have four or more ACEs.<sup>3</sup>
- The economic burden of child abuse and neglect, one type of ACE, in the United States is conservatively in the hundreds of billions of dollars each year.<sup>4</sup>
- Experiencing adversity in childhood can change the way the brain develops and functions, contributing to increased risk of chronic diseases, such as diabetes, cancer, stroke, substance use, suicide, and other injury and violence outcomes.<sup>5</sup>

### SUICIDE, OVERDOSE AND EARLY DEATH

- From 1999-2018, suicide rates have risen 35 percent.<sup>6</sup>
- During the same period, over 745,000 people died by suicide<sup>7</sup> and nearly 450,000 people died from an overdose involving any opioid, including prescription and illicit opioids.<sup>8</sup>
- ACEs are associated with younger age of opioid initiation, injection drug use, and lifetime overdose.<sup>9</sup>
- Experiencing trauma before age 18 is associated with increased odds of opioid misuse; the odds of opioid misuse are approximately three times higher among adults with four or five or more different experiences of trauma.<sup>10</sup>
- Having any ACE is associated with an increased risk for suicide; the odds of ever attempting suicide are 30 times higher for adults with four or more ACEs compared to adults with no ACEs.<sup>11</sup>
- ACEs are associated with at least five of the 10 leading causes of death.<sup>5</sup>

### THE CONNECTION

- Adverse childhood experiences increase the risk of overdose and suicide later in life.
- Opioid Use Disorder (OUD) involving prescription opioids was associated with an increase of **40 to 60% in the risk of suicidal ideation**.<sup>12</sup>
- Losing a loved one to overdose or suicide are themselves adverse childhood experiences that can increase the risk of overdose or suicide.<sup>13</sup>
- Preventing exposure to adverse childhood experiences is an important step in reducing the risk for overdose and suicide, and many other negative health and wellbeing outcomes.
- Low educational attainment, unemployment, and poverty are shared risk factors for ACEs, suicide, and overdose that can reverberate across generations.<sup>14</sup>



**Centers for Disease  
Control and Prevention**  
National Center for Injury  
Prevention and Control



## EFFECTIVE WAYS TO PREVENT ALL THREE ISSUES

There is great potential for coordinating and aligning funding, programs and policies to have greater impact on these three issues together than the current efforts that focus on each issue individually.

1. Generate **understanding of the connection between ACEs, overdose, and suicide** to inform more holistic, comprehensive, and effective policy, programmatic interventions, funding, and service delivery. Use shared, evidence-based, and easy-to-understand messages that create urgency.
2. Engage **with individuals as leaders for prevention and change** in their own communities, including those with lived experience, decision-makers, and others.
3. Employ a **comprehensive public health approach** to prevent harm in the first place.
  - Identify people at-risk early and ensure equitable access to needed programs and services.
  - Provide long-term social and economic supports (e.g., income support for working families, paid family and sick leave, high quality childcare, housing support, and access to substance use treatment that increase safe, stable, nurturing relationships and environments).
  - Teach coping and problem-solving skills including parenting programs for adults and social-emotional learning programs to prevent or mitigate the effects of ACEs, suicide or suicide attempts, and overdose.Efforts may be most effective if we begin by focusing policies, funding and programs where the need is greatest.
4. Invest in **research and evaluation** to develop, test, implement, and translate evidence-based strategies to prevent ACEs, opioid overdose and suicide, and to address the connection between them.

**For more information, visit:**

<https://www.cdc.gov/injury/priority/index.html>

<sup>1</sup> [https://www.cahmi.org/wp-content/uploads/2018/05/aces\\_fact\\_sheet.pdf](https://www.cahmi.org/wp-content/uploads/2018/05/aces_fact_sheet.pdf)

<sup>2</sup> <https://mchb.hrsa.gov/sites/default/files/mchb/Data/NSCH/nsch-data-brief.pdf>

<sup>3</sup> <https://www.cdc.gov/violenceprevention/aces/ace-brfss.html>

<sup>4</sup> <https://www.cdc.gov/injury/wisqars/cost/>

<sup>5</sup> <https://www.cdc.gov/vitalsigns/aces/index.html>

<sup>6</sup> <https://www.cdc.gov/nchs/data/databriefs/db362-h.pdf>

<sup>7</sup> <https://www.cdc.gov/injury/wisqars/fatal.html>

<sup>8</sup> Wilson N, Kariisa M, Seth P, Smith H IV, Davis NL. Drug and Opioid-Involved Overdose Deaths — United States, 2017–2018. *MMWR Morb Mortal Wkly Rep* 2020;69:290–297. DOI: <http://dx.doi.org/10.15585/mmwr.mm6911a4>

<sup>9</sup> Stein MD, Conti MT, Kenney S, et al. Adverse childhood experience effects on opioid use initiation, injection drug use, and overdose among persons with opioid use disorder. *Drug Alcohol Depend.* 2017;179:325–329. doi:10.1016/j.drugalcdep.2017.07.007

<sup>10</sup> Quinn K, Boone L, Scheidell JD, Mateu-Gelabert P, McGorray SP, Beharie N, et al. The relationships of childhood trauma and adulthood prescription pain reliever misuse and injection drug use. *Drug and Alcohol Dependence.* 2016;169:190–8.

<sup>11</sup> Hughes K, Bellis MA, Hardcastle KA, Sethi D, Butchart A, Mikton C, Jones L., Dunne MP. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet*; 2017;2:e356–66.

<sup>12</sup> <https://pubmed.ncbi.nlm.nih.gov/28364579/>

<sup>13</sup> <https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf>

<sup>14</sup> 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;72:141–149.