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### **SPECIAL ARTICLE**

### Preventing Childhood Adversity Through Economic Support and Social Norm Strategies



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Through the Essentials for Childhood program, the Centers for Disease Control and Prevention funds 7 state health departments (states) to address the urgent public health problem of adverse childhood experiences and child abuse and neglect, in particular. Through interviews and document reviews, the paper highlights the early implementation of 2 primary prevention strategies from the Centers for Disease Control and Prevention's child abuse and neglect technical package with the greatest potential for broad public health impact to prevent adverse childhood experiences strengthening economic supports and changing social norms. States are focused on advancing family-friendly work policies such as paid family and medical leave, livable wage policies, flexible and consistent work schedules, as well as programs and policies that strengthen household financial security such as increasing access to Earned Income Tax Credit. In addition, states are launching campaigns that focus on reframing the way people think about child abuse and neglect and who is responsible for preventing it. State-level activities such as establishing a diverse coalition of partners, program champions, and state action planning have helped to leverage and align resources needed to implement, evaluate, and sustain programs. States are working to increase awareness and commitment to multisector efforts that reduce adverse childhood experiences and promote safe, stable, nurturing relationships and environments for children. Early learning from this funding opportunity indicates that using a public health approach, states are well positioned to implement comprehensive, primary prevention strategies and approaches to ensure population-level impact for preventing child abuse and neglect and other adverse childhood experience.

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### INTRODUCTION

xperiences in early childhood have the potential to impact overall development and health over I time. It is well established that potentially traumatic events in childhood such as neglect and experiencing or witnessing violence, abuse, and other aspects of a child's environment that can undermine their sense of safety, stability, and bonding can result in long-term negative health consequences and reduced life opportunities in adulthood. 1-3 Implementing prevention strategies that protect children from adverse childhood experiences (ACEs) or their consequences helps to promote lifelong health and well-being, increases productivity, and saves hundreds of billions of dollars each year.<sup>4,5</sup> As a public health From the <sup>1</sup>Division of Violence Prevention, National Center on Injury Prevention and Control (NCIPC), Centers for Disease Control and Prevention, Atlanta, Georgia; <sup>2</sup>Department of Health Policy and Behavioral Sciences, Georgia State University School of Public Health, Atlanta, Georgia; <sup>3</sup>Office of the Deputy Director for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia; <sup>4</sup>Division of Global Health Protection, Center for Global Health, Centers for Disease Control and Prevention, Atlanta, Georgia; and <sup>5</sup>Extramural Research Program Operations, National Center for Injury Prevention and Control (NCIPC), Centers for Disease Control and Prevention, Atlanta, Georgia

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issue, addressing ACEs requires public health approaches to ensure widespread uptake and commitment to primary prevention (i.e., preventing them from occurring in the first place). 6,7 In particular, efforts that focus on building healthy families, promoting societal norms that protect against adversity, and addressing the conditions that put children and families at-risk for ACEs have been found to prevent and mitigate the effects of ACEs. 8–11

A category of ACEs that the Centers for Disease Control and Prevention (CDC)'s Division of Violence Prevention has historically addressed is child abuse and neglect (CAN), which includes physical, emotional, and sexual violence. CAN is a significant problem in the U. S.<sup>12</sup> Approximately 1 in 7 children have experienced child abuse or neglect in the past year; and in 2018, nearly 1,770 children died of abuse and neglect in the U. S.<sup>13</sup> Similar to other ACEs, CAN may result in deleterious consequences, including social, behavioral, and negative health outcomes. 14,15 Research indicates that community and societal factors such as experiencing poverty, residential instability, unemployment, and ongoing historical trauma (e.g., racism) are attributable to higher rates of CAN. 16 The interconnection between CAN and other forms of violence suggests that preventing CAN has the potential to prevent other forms of violence and adversity later in life (e.g., delinquency in adolescence). To Given this, preventing CAN requires large-scale, comprehensive, and multisector efforts that support environments and provide access to social services, health care, and employment. To achieve this goal, CDC published a series of technical packages, 18 alongside a resource document to address CAN and ACEs.8 These resources are designed to inform and guide states and communities about the best available evidence to prevent CAN and other forms of violence.

### **Essentials for Childhood Initiative**

The Essentials for Childhood initiative (Essentials) began as a conceptual framework to communicate objectives related to safe, stable, nurturing relationships and environments for optimal child health. The framework highlights the need for programs and policies that promote healthy relationships and environments for children. To meet this need, CDC funded a 5-year cooperative agreement in 2018 (CE18–1803) with 7 state health departments (states) to implement prevention strategies that address CAN and related ACEs. The states are California, Colorado, Kansas, Massachusetts, North Carolina, Utah, and Washington. States with existing statewide violence prevention action plans and sufficient staff and resource capacity were selected through a competitive application process. Of

particular importance for the field is understanding the implementation of proven strategies and the context in which they are successful.<sup>21</sup> Examining the early implementation of the Essentials initiative provides an opportunity to translate science to practice and understand how the strategies in the CAN technical package work in real-world settings.<sup>22</sup>

Essentials posit that implementing prevention strategies for the general population while focusing on those at highest risk for CAN closes the gap of the inequitable burden of CAN and increases the potential impact of prevention efforts (Appendix Figure 1, available online). States are expected to leverage multisector partnerships, enhance an existing CAN state plan, and conduct program evaluation activities.

### Focus on Economic Supports and Norms Change to Prevent Childhood Adversity

Essentials focus on 2 strategies from the CAN technical package: strengthening economic supports and changing social norms. These strategies are intended to impact the social conditions that put children at-risk or protect them from CAN. The first strategy, strengthening economic supports, stems from research showing the negative impacts of financial hardship on parents' mental health; family relationships; and children's health, education, and social outcomes.<sup>23,24</sup> This strategy is implemented through 2 main approaches: strengthening household financial security (e.g., increasing income through tax credits, child support payments, nutrition benefits, and subsidized child care) and family-friendly workplace policies (FFWPs) (e.g., paid family leave and flexible schedules). These approaches help families to balance work and personal responsibilities and increase economic stability to improve the basic needs of children and family.<sup>8,17,25</sup> In addition, these approaches help to reduce parental stress and depression, which have been shown to impact both parent and child well-being.8

The second strategy promotes social norms that protect against violence and adversity. Social norms are beliefs and behaviors considered acceptable to a group or society. A dominant narrative around CAN is that parents are to blame for their children's adversity. <sup>17,26</sup> Strategies focused on changing norms shift the perceived responsibility for children's well-being from individuals to a shared responsibility within the larger community and society (collective prosperity). Research suggests that changing norms to focus on reducing stigma around help seeking, promoting supportive and positive parenting, and enhancing connectedness to family and community can protect against violence and adversity. <sup>17,25,27</sup>

Public education campaigns have been shown to be an effective public health approach to change norms and

behavior and help to reframe the way people think, talk about, and prevent CAN.<sup>8,17</sup>

### **Purpose**

Understanding that CAN is a type of ACE, this paper describes the early implementation of CAN prevention strategies within the first 2 years of the Essentials program. This program provides a unique opportunity to apply the best available scientific evidence to inform practice. Specifically, 3 evaluation questions are addressed: (1) What prevention strategies are states implementing and how? (2) How are states building state-level supports to implement their strategies? and (3) How are states evaluating their prevention activities?

### **METHODS**

CDC evaluation team (composed of 2 behavioral scientists and 2 fellows) collected and analyzed data across the 7 funded states. Data sources and activities included document reviews of funded states' deliverables (e.g., implementation plan), bimonthly call notes, and interviews with program directors/principal investigators and program implementers.

#### **Document Reviews**

The team reviewed state deliverables outlining each state's planning efforts and the types and focus of their prevention activities. The documents summarized proposed implementation statewide and evaluation activities. For each document, a standardized rubric was used to extract and organize information. Data were extracted on key elements and themes. Two team members extracted information independently, then reviewed each other's work for consistency.

The team reviewed 4 documents. The implementation plans highlight how states planned to implement each of their prevention strategies, including populations of interest, partnership engagement, and key activities. The state action plans outline the plan for states to increase statewide coordination and collaboration and leverage multisector partnerships and resources. The evaluation plans describe how states plan to evaluate the progress of program activities, including strategy implementation. At the time of review, 6 evaluation plans were available for review. Bimonthly call notes (between 2018 and 2020) included the summaries of monthly conversations between CDC and each states' Essentials team, typically comprising program implementers and evaluators, to gain ongoing contextual information regarding implementation and evaluation activities.

### **Telephone Interviews**

CDC team conducted 14 key informant interviews—with 7 program directors/principal investigators and 7 program implementers. Interview guides were distinct for each respondent type and included questions on the basis of key areas of the evaluation (e.g., partnerships, capacity, reach). States identified individuals most suited for the respective interviews. Program directors/principal investigators reported on their state's overall approach to partnership engagement, resources, capacity, and sustainability efforts. Program implementers provided details about the implementation

and reach of the prevention strategies. Each interviewee received a list of sample questions before the interview. Two team members participated in interviews—1 notetaker and 1 interviewer. Participants verbally consented to participate and to be audio recorded before the interview. They were informed that their funding would not be impacted by their responses and could opt out of answering specific questions. Interviews lasted approximately 30 minutes to 1 hour.

### **Data Analysis**

The team conducted content and descriptive analyses of the 4 review documents and telephone interviews. All documents, with exception of state action plans, used a standard template, allowing a focused review and extraction of pertinent information. CDC's recommended elements for the state action plan guided the content analysis. The team transferred interview notes (confirmed for accuracy with the recordings) into a spreadsheet for thematic analysis. A total of 3 members of the evaluation team collectively reviewed 1 interview to standardize data extraction and ensure reliability. For both document reviews and interview notes, a priori themes were developed, analyzed, and summarized on the basis of evaluation focus areas and nuances of interview responses. The themes were implementation successes and challenges, capacity to implement prevention strategies, reach of populations of interest, partnerships, link to ACEs, and state action plan implementation. After analysis, the team synthesized the data into an aggregate summary.

#### **Ethical Considerations**

Document reviews of program deliverables are conducted as part of the cooperative agreement and are not subject to IRB. Key informant interviews received IRB classification of exempt by CDC's internal IRB/clearance process because they were part of routine program evaluation, were not research, and did not collect information on individuals.

### **RESULTS**

This section highlights the findings from the program evaluation of the Essentials initiative and reports on program activities and the process by which states worked to prevent adversity. The goal was not to draw conclusions about the effectiveness of these approaches but to understand how these approaches worked in practice and to shed light on some potentially effective ways to use the best available evidence to prevent adversity and inform program decisions.

# What Prevention Strategies Are States Implementing and How?

States implemented multiple programs and policies as part of the economic supports and social norms change strategies (Appendix Table 1, available online). For both strategies, states aimed to reach (1) families with young children and businesses (i.e., employers and employees) and (2) high-risk populations, including families in high-poverty communities, low-wage

workers, families eligible for benefits assistance (e.g., Temporary Assistance to Needy Families), and rural and tribal populations.

To enhance economic supports, 5 states advanced FFWPs such as paid family and medical leave, livable wage policies, flexible work schedules, and consistent schedules. In addition, 5 states implemented strategies to increase access to benefits such as nutrition assistance programs, Temporary Assistance for Needy Families, and Earned Income Tax Credit (EITC). States brokered relationships with healthcare organizations and Volunteer Income Tax Assistance sites to expand access to low-income people. The key to advancing economic stability was reducing systemic barriers to programs and policies, including those that promote food and housing security and child care.

All the 7 states implemented public engagement and education campaigns. The intent of these campaigns was to ultimately move from raising awareness to commitment and investment in programs and policies that support children and families. Examples of campaigns included increasing community support and connectedness around positive parenting, establishing norms around safe and effective disciplinary methods, instituting community norms associated with collective prosperity, and increasing awareness about the benefits of FFWPs. States used toolkits, podcasts, videos, Twitter, and other media tools to raise awareness and identify connections between various partner organizations to advance the work. These efforts were aimed at changing the community narrative to inform policy choices that prevent childhood adversity.

Addressing health and racial equity was noted as an essential element of implementation. Some states held equity summits for partners to bring awareness to economic inequalities among some populations. One state launched an equity subcommittee within the coalition to discuss improving the lives of children disproportionately affected by CAN. Other states developed advisory committees with an intentional role in reaching underserved populations. Understanding the impact of poverty was central to this work.

# How Coalitions and Partners Support Implementation

All the 7 states worked with an existing multisector coalition to guide their work. Coalition members represented multiple sectors (both government and nongovernment) and formed a public health partnership with states to engage in outreach activities, mobilize public support, promote the state's activities, and unite diverse interests to prevent CAN. State coalitions were diverse across states. Some states worked to identify the

right coalition partners, whereas others were well established. One state had a coalition with 130 individuals representing 40 different organizations, noting that it is difficult to create strategies that are one size fits all in a diverse state. Coalition members in another state were asked to identify strategic partners through consensus to join the coalition.

A critical aspect of this work was identifying and engaging key partners with clearly defined roles and responsibilities. States involved partners from a wide range of sectors, including community-based organizations, businesses, health centers, academic institutions, child advocacy organizations, child welfare, education, early childhood, housing, health and human services, and other state and local agencies. One state partnered with the Department of Commerce to facilitate the provision of FFWPs. Other states partnered with community development corporations to implement stable housing policies. States working to expand access to EITC partnered with the Tax Commissioner's Office and Volunteer Income Tax Assistance sites. Partnership with academic institutions helped states to implement local programs and access data about their programs. Most states identified partners with mutually beneficial interests, including the Prevent Child Abuse chapter and the Children's Trust Fund in their state. Critical partners included health and human services, social services, child and family services, and workforce services because these partners share interest, passion, and connected states with high burden families and communities.

### Challenges to Implementation

Although states reported many positive aspects of their implementation, they also reported a range of early challenges. Communicating the complexity of the program to partners (e.g., the interplay among family, community, economic, and cultural contexts to prevent CAN) was particularly difficult. Limited time commitments from stakeholders, inability to include perspectives from key groups such as parents, difficulty in reaching populations from rural areas, and unanticipated local political barriers also presented challenges. According to 1 state, any shift in the political landscape brought uncertainty about whether there will be support for certain policies. Challenges stemming from staffing and logistical constraints were evident. States reported having limited capacity and resources to keep up with the expansion and growth of the activities being implemented. Some states reported a lapse in hiring staff and difficulty in obtaining commitments from partners. In some cases, partners did not have the same level of access and influence with programs such as the Supplemental Nutrition Assistance Program, making them difficult to engage. In

addition, competing priorities and uncertainty about roles made collaboration also difficult. One implementer noted, "Most people in the business sector don't recognize the role that they play in CAN prevention, but as you know, they certainly have a role." Finally, engaging rural communities or those further away from urban areas with limited access to resources was a big challenge.

States with more success in overcoming challenges were those with longstanding partnerships, state resources, and political will. Having well-established partnerships resulted in easily finding champions for this work. Obtaining resources such as video and teleconference capabilities helped to increase the participation of rural communities in 1 state. One state's strong relationship with their surgeon general (whose priorities aligned) facilitated partnerships and uplifted the work of the health department.

## Indicators of Early Success for Statewide Primary Prevention

As part of state action planning, states must demonstrate a vision for CAN prevention for both the larger population and targeted approaches to address barriers for specific subgroups. Reports of early success were based on recipient interviews. According to states, early success involved establishing strong relationships and effective partnerships, ensuring that local organizations with shared experiences (e.g., local Prevent Child Abuse chapter) are at the table, and participating in effective engagement. This means emphasizing messages such as "here's how we see our program [Essentials] connected to the thing you care about." States helped other sectors to reframe how their work fits in a public health framework. One approach included participating in co-training activities with groups such as the Chamber of Commerce to help both employers and employees see the benefits of FFWP-what it looks like and how it helps. According to an implementer, "it's not about the knowledge of child care policies, it's about the people and connections you make with the right people."

Another indication of early success was using a public health strategy to leverage existing resources and supports from across the state. States brokered relationships with healthcare organizations and community Volunteer Income Tax Assistance sites to expand access to EITC for low-income people. One state worked with an early childhood foundation to implement a program targeted at a broad range of employers across the state. This program developed a guide and workshop for employers on how to implement FFWP and offered human resource professionals credit hours for attending a course on FFWP. Another element of success was shifting public

education campaigns from not just a focus on raising awareness but also connecting families to needed resources and partnering with them to understand what barriers they face.

States also showed early success in addressing racial and income inequities to help families achieve their full health potential. States intentionally deepened their level of engagement with communities of color—making sure families understand their eligibility for programs such as EITC. States also ensured that their staff were well trained on racial equity issues. Two states held equityfocused summits. One training focused on understanding how various economic policies impact families differently. For example, laws designed to help families may unintentionally increase disparities if receiving some benefits make families ineligible for others. States have worked to identify economic support gaps through their work with local organizations that have built trust with families. Listening sessions were reported as a successful approach to reaching underserved populations. These activities have helped to close the gaps associated with the inequitable burden of CAN experienced by specific subgroups.

### **Evaluation of Prevention Strategies**

This section describes the outcomes that states proposed to achieve during the funding cycle. State-level outcomes are standard across funded states and measure the resources and supports obtained and partner engagement. Program-level outcomes vary across states and measure risk factors for ACEs such as family disruptions in daily routines and community violence and protective factors such as access to social supports and health care and supportive community and family environments.

Across the 6 reviewed state evaluation plans, a total of 86 unique outcomes (range of 15-30 per state) and 251 unique indicators (range of 33-85 per state) were reported. The most common program outcomes were identified (i.e., measured by  $\geq 3$  states). Examples were increased access and reduced barriers for enrollment to assistance programs, increased number of business partners supporting FFWPs, and increased family connections to resources (Appendix Table 2, available online). States also examined the risk and protective factors for ACEs specifically (e.g., reduction in family violence and mental illness) (Appendix Table 3, available online).

States reported the use of 141 unique data sources to track indicators: 62 were primary data sources, and 79 were secondary data sources. All the 6 plans reported the use of state government data and program data, including data from sources such as Departments of Education, Departments of Children and Families, meeting minutes, and partner reports. Other common data

sources included the Behavioral Risk Factor Surveillance System (5 states), the American Community Survey (4 states); the National Survey of Children's Health (4 states); Pregnancy Risk Assessment Monitoring System (3 states); CDC's Awareness, Commitment, and Social Norms Survey; and National Kids COUNT (2 states each). States used evaluation data to high-risk populations (e.g., used Behavioral Risk Factor Surveillance System data to identify areas with high ACE scores) and to identify and track health disparities (e.g., identify pilot communities with increased disparities to facilitate enrollment for assistance programs).

### DISCUSSION

Although researchers have established that addressing early adversity such as CAN may lead to better outcomes for children and families, the conditions that lead to childhood adversity are vast and complex. More and more states are beginning to address these factors using comprehensive approaches. However, the best mechanisms for building a sustainable foundation to implement multifaceted prevention approaches are not yet widely understood. This paper examined the early implementation of the Essentials for Childhood initiative to better understand the factors that enable states to implement comprehensive strategies to prevent CAN. Given the overlap of risk and protective factors for CAN and other forms of violence and adversity, implementing strategies that prevent CAN will likely impact the extent to which children experience ACEs more broadly.

## Implementation of Strategies Using the Best Available Evidence

The findings from this paper indicate that establishing a diverse coalition of partners and program champions helps to leverage and align the resources needed to implement, evaluate, and sustain programs. These partnerships have been a key driver in states' implementation progress. Partners within sectors beyond public health have been particularly important. For example, representatives from the business sector proved to be a vital partner in establishing collective responsibility for planning and implementing program strategies. In addition, building partnerships with and among local-level stakeholders helped to build capacity to address CAN, and commitment from state agencies helped to cultivate the public will to address childhood adversity.

Although some of the strategies in the CAN technical package were novel for some states, they were all able to implement strategies with the highest potential for population-level impact. Funded states identified a wide range of activities that helped to advance FFWPs,

including paid family and medical leave, livable wage policies, flexible work schedules and consistent schedules, and programs and policies that strengthen household financial security. In many cases, they were able to form partnerships with new sectors that were also working in these areas. In addition, states worked to shift the framing or messaging around CAN through public engagement and education campaigns and moving from just awareness to promoting more positive norms.

### The Impact of COVID-19

The data for this paper were collected before the coronavirus disease 2019 (COVID-19) pandemic (February 2020). Subsequent informal conversations with states indicated that the pandemic led to canceled events, delayed timelines, and a shift in focus to the pandemic. However, it also presented opportunities. Shifting to a virtual environment allowed states to increase participation and reach more families. It also brought greater awareness, particularly to partners, about the benefits of FFWPs. The long-term impacts are unclear, but states have used this opportunity to take actionable steps to educate stakeholders about these issues.

### **Limitations and Future Directions**

Understanding the early factors that influence CAN prevention strategies is an important part of ongoing development and improvement in an emerging area, such as addressing childhood adversity. However, there are limitations to these initial evaluation findings. First, the focus of the present analysis is on factors that influence the implementation of economic and social norms strategies within the first 2 years of a funding initiative. Social change strategies take time to develop and fully implement. Therefore, these findings only represent early indicators of implementation as well as factors that facilitate or impede it. Other factors may emerge as more important drivers of successful implementation are uncovered. A related limitation is that these findings were focused on process evaluation. As such, no link between the implementation of prevention strategies and the specific outcomes being tracked by states is made. However, the evaluation planning suggests that states are in a good position to evaluate the effectiveness of their prevention activities, and future examination of this work will be able to assess whether states achieved their outcomes. Another potential limitation is whether CDC interviews may have affected recipient responses. Although recipients are required to participate in CDCsponsored activities, they could opt out of answering questions, and their funding would not be impacted by their responses.

The strength of the findings is that assessing early factors that affect implementation rather than waiting until the end of 5 years supports real-time program improvement and sharpens future evaluation activities. To truly understand state-level efforts, other methods such as monitoring national policies and trends in social norms are important to fully evaluate how Essentials contributes to intended changes. Because CAN is a form of ACE, what is learned becomes relevant to ACE prevention. Currently, CDC is assessing ACEs through a new funding opportunity described by Guinn and colleagues<sup>30</sup> in this supplement, which focuses on using surveillance data for program planning and improvement.

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### SUPPLEMENTAL MATERIAL

Supplemental materials associated with this article can be found in the online version at https://doi.org/10.1016/j.amepre.2021.11.016.

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### **REFERENCES**

- Dube SR, Anda RF, Felitti VJ, Edwards VJ, Croft JB. Adverse childhood experiences and personal alcohol abuse as an adult. *Addict Behav*. 2002;27(5):713–725. https://doi.org/10.1016/s0306-4603(01)00204-0.
- Institute of Medicine, National Research Council. From Neurons to Neighborhoods: the Science of Early Childhood Development. Washington DC: The National Academies Press, 2000.
- Shonkoff JP, Garner AS. Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics.*. 2012;129(1):e232–e246. https://doi.org/10.1542/peds.2011-2663.
- Metzler M, Merrick MT, Klevens J, Ports KA, Ford DC. Adverse child-hood experiences and life opportunities: shifting the narrative. *Child Youth Serv Rev.* 2017;72:141–149. https://doi.org/10.1016/j.child-vouth.2016.10.021.
- Peterson C, Florence C, Klevens J. The economic burden of child maltreatment in the United States, 2015. *Child Abuse Negl.* 2018;86:178– 183. https://doi.org/10.1016/j.chiabu.2018.09.018.
- Frieden TR. Six components necessary for effective public health program implementation. *Am J Public Health*. 2014;104(1):17–22. https://doi.org/10.2105/AJPH.2013.301608.
- Mercy JA, Rosenberg ML, Powell KE, Broome CV, Roper WL. Public health policy for preventing violence. *Health Aff (Millwood)*. 1993;12 (4):7–29. https://doi.org/10.1377/hlthaff.12.4.7.
- Centers for Disease Control and Prevention. Preventing adverse child-hood experiences: leveraging the best available evidence. Atlanta, GA:
   National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2019. https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf. Accessed December 7, 2021.
- Centers for Disease Control and Prevention. Vital signs: adverse child-hood experiences (ACEs) preventing early trauma to improve adult health. Atlanta, GA: Centers for Disease Control and Prevention; November 2019. https://www.cdc.gov/vitalsigns/aces/pdf/vs-1105-aces-H.pdf. Accessed December 7, 2021.
- Jones CM, Merrick MT, Houry DE. Identifying and preventing adverse childhood experiences: implications for clinical practice. *JAMA*. 2020;323(1):25–26. https://doi.org/10.1001/jama.2019.18499.
- 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. MMWR Morb Mortal Wkly Rep. 2019;68(44):999–1005. https://doi.org/10.15585/mmwr.mm6844e1.
- Finkelhor D, Turner HA, Shattuck A, Hamby SL. Prevalence of child-hood exposure to violence, crime, and abuse: results from the National Survey of Children's Exposure to Violence. *JAMA Pediatr.* 2015;169 (8):746–754. https://doi.org/10.1001/jamapediatrics.2015.0676.
- Centers for Disease Control and Prevention. Preventing child abuse and neglect. Atlanta, GA: Centers for Disease Control and Prevention; 2020. https://www.cdc.gov/violenceprevention/pdf/can/CAN-fact-sheet\_2020.pdf. Accessed June 12, 2020.
- Dube SR, Anda RF, Felitti VJ, Croft JB, Edwards VJ, Giles WH. Growing up with parental alcohol abuse: exposure to childhood abuse, neglect, and household dysfunction. *Child Abuse Negl.* 2001;25 (12):1627–1640. https://doi.org/10.1016/s0145-2134(01)00293-9.
- 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. Prev Med. 2003;37(3):268–277. https://doi.org/10.1016/s0091-7435(03)00123-3.
- Sedlak AJ, Mettenburg J, Basena M, et al. Fourth National Incidence Study of Child Abuse and Neglect (NIS-4): report to Congress, executive summary. Washington, DC: HHS, Administration for Children and Families; 2010. http://www.childhelp.org/wp-content/uploads/2015/07/ Sedlak-A.-J.-et-al.-2010-Fourth-National-Incidence-Study-of-Child-Abuse-and-Neglect-NIS%E2%80%934.pdf. Accessed December 7, 2021.

- Ryan JP, Williams AB, Courtney ME. Adolescent neglect, juvenile delinquency and the risk of recidivism. J Youth Adolesc. 2013;42 (3):454–465. https://doi.org/10.1007/s10964-013-9906-8.
- Fortson BL, Klevens J, Merrick MT, Gilbert LK, Alexander SP. Preventing child abuse and neglect: a technical package for policy, norm, and programmatic activities. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2016. https://www.cdc.gov/violenceprevention/pdf/can-prevention-technical-package.pdf. Accessed December 7, 2021.
- Haegerich TM, David-Ferdon C, Noonan RK, Manns BJ, Billie HC. Technical packages in injury and violence prevention to move evidence into practice: systematic reviews and beyond. *Eval Rev.* 2017;41 (1):78–108. https://doi.org/10.1177/0193841X16667214.
- Essentials for childhood. Centers for Disease Control and Prevention. <a href="https://www.cdc.gov/violenceprevention/childabuseandne-glect/essentials.html">https://www.cdc.gov/violenceprevention/childabuseandne-glect/essentials.html</a>. Updated March 4, 2021. Accessed December 7, 2021.
- 21. State Essentials for Childhood Initiative: implementation of strategies and approaches for child abuse and neglect prevention. (Funding Opportunity Announcement CDC-RFA-CE18-1803). Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2018. https://www.grants.gov/web/grants/view-opportunity.html?oppId=303817. Accessed December 7, 2021.
- Estabrooks PA, Brownson RC, Pronk NP. Dissemination and implementation science for public health professionals: an overview and call to action. *Prev Chronic Dis.* 2018;15:E162. 30576272. https://doi.org/10.5888/pcd15.180525.
- Rapport F, Clay-Williams R, Churruca K, Shih P, Hogden A, Braithwaite J. The struggle of translating science into action: foundational concepts of implementation science. *J Eval Clin Pract.* 2018;24 (1):117–126. https://doi.org/10.1111/jep.12741.

- Stith SM, Liu T, Davies LC, et al. Risk factors in child maltreatment: a meta-analytic review of the literature. *Aggress Violent Behav.* 2009;14 (1):13–29. https://doi.org/10.1016/j.avb.2006.03.006.
- Capaldi DM, Knoble NB, Shortt JW, Kim HK. A systematic review of risk factors for intimate partner violence. *Partner Abuse*. 2012;3 (2):231–280. https://doi.org/10.1891/1946-6560.3.2.231.
- 26. Niolon PH, Kearns M, Dills J, et al. Preventing intimate partner violence across the lifespan: a technical package of programs, policies, and practices. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2017. https://www.cdc.gov/violenceprevention/pdf/ipv-technicalpackages.pdf. Accessed December 7, 2021.
- Frameworks Institute. Making the public case for child abuse and neglect; prevention: a FrameWorks message memo. Washington, DC: Frameworks Institute; 2004. https://www.frameworksinstitute.org/wpcontent/uploads/2020/06/MakingthePublicCaseforChildAbuseandNeglectPrevention\_2004.pdf. Accessed June 10, 2021.
- Basile KC, DeGue S, Jones K, et al. STOP SV: A technical package to prevent sexual violence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2016. https://www.cdc.gov/violenceprevention/pdf/sv-preventiontechnical-package.pdf. Accessed December 7, 2021.
- David-Ferdon C, Vivolo-Kantor AM, Dahlberg LL, Marshall KJ, Rainford N, Hall JE. A comprehensive technical package for the prevention of youth violence and associated risk behaviors. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2016. https://www.cdc.gov/violenceprevention/pdf/yv-technicalpackage.pdf. Accessed December 7, 2021.
- Guinn AS, Ottley PG, Anderson KN, Oginga ML, Gervin DW, Holmes GM. Leveraging surveillance and evidence: preventing adverse childhood experiences through data to action. *Am J Prev Med*. 2022;62(6S1):S24–S30.