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Health **Policy** Brief

Adverse Childhood Experiences (ACEs)

A strategic approach to prevent ACEs in Ohio

Overview

Safe, stable environments and nurturing relationships are essential for children's healthy growth and development. Children in families that are stressed and that do not have access to necessary supports are more likely to be exposed to adversity and trauma or Adverse Childhood Experiences (ACEs). Exposure to ACEs can cause serious and long-lasting health and economic harms that persist across generations.[1]

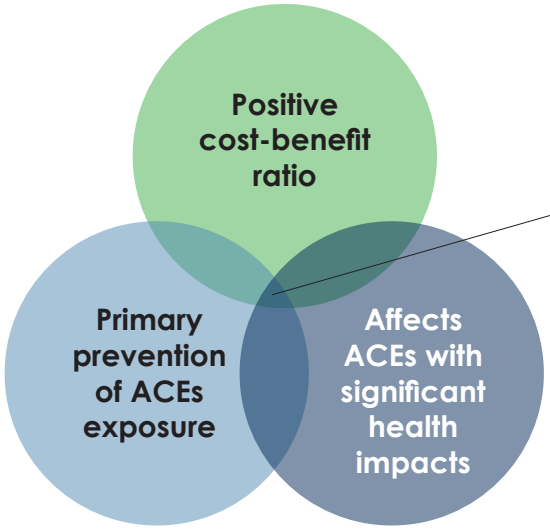
ACEs are common. In Ohio, one in five children were exposed to ACEs in 2018-2019.[2] However, ACEs are not inevitable and Ohioans are resilient. Exposure to ACEs does not have to determine future hardship. There are strategies that state policymakers and others can deploy to prevent ACEs and safeguard the well-being of Ohio children and families who have experienced adversity and trauma.

Ensuring that all children have a fair opportunity to thrive is a value shared by many Ohioans. Leaders across both the public and private sector have expressed a strong commitment to this value and have taken actions to lay a solid foundation for families and children. This brief, the third in HPIO's **Ohio ACEs Impact Project**, provides insights to build upon these successes and support a comprehensive and strategic approach that maximizes resources to prevent ACEs and advance equitable outcomes.

3 key findings for policymakers

- **Focusing action on key strategies can have a powerful impact.** State policymakers and other partners can maximize the effectiveness of public and private spending to prevent ACEs by focusing on 12 cost-beneficial strategies (see figure 1).
- **ACEs are not inevitable.** Significantly reducing the number of children in Ohio who are exposed to ACEs requires getting ahead of potential harms, creating safe, stable and nurturing environments and fostering resilience.
- **ACEs prevention efforts must reach children and families most at risk.** Ohio's public and private leaders should equip communities to support children and families that are most at risk for experiencing adversity and trauma, such as Ohioans of color and Ohioans with low incomes, disabilities and/or who live in urban and Appalachian areas.

Figure 1. **Key strategies for preventing ACEs in Ohio**



12 key strategies

- Early childhood education programs 〓
- Early childhood home visiting 〓
- Medical-legal partnerships 〓
- Family income supports 〓
- Community-based violence prevention 〓
- School-based violence, bullying and intimate partner violence prevention programs
- Parent/caregiver and family skills training 〓
- School-based social and emotional instruction
- Mentoring programs for delinquency 〓
- Drug courts
- Trauma-informed care
- Behavioral health treatment

〓 = There is evidence that the strategy reduces disparities and inequities.

Note: Additional information on these 12 key strategies, identified through a cost-benefit analysis, can be found on page 9.

Inside

What are ACEs?

ACEs are defined as "potentially traumatic events" that occur during childhood (ages 0-17).[3] There is variation among researchers in what is considered an ACE. However, ACEs can generally be grouped into three categories: abuse, household challenges and neglect. Figure 2 lists ACEs included in these categories as defined by the national Behavioral Risk Factor Surveillance System (BRFSS).

Some adverse events in childhood, such as experiencing food insecurity, not feeling safe in one's neighborhood or being bullied, can negatively impact the lives of children, but are not typically included in surveys or research about ACEs. There is also a growing body of research connecting racism and other forms of discrimination to ACEs, trauma and toxic stress.

What factors impact exposure to ACEs?

A strategic approach to preventing and mitigating the harms of ACEs must focus on both promoting protective factors and reducing risk factors for ACEs.

Protective factors are assets and resources that can buffer children and families from the harmful effects of

What are the health and economic costs of ACEs in Ohio?

Key findings from HPIO's Ohio ACEs Impact Project briefs, **Adverse Childhood Experiences: Health Impact of ACEs in Ohio** and **Adverse Childhood Experiences: Economic Impact of ACEs in Ohio**, highlight:

1. **Exposure to ACEs is a pervasive problem that has both health and economic consequences**
   - Nearly two-thirds (61%) of Ohio adults reported exposure to ACEs during childhood
   - Ohioans who reported experiencing multiple ACEs were also more likely to report poor health outcomes and behaviors — Ohioans of color and Ohioans with low income, disabilities and/or who live in urban and Appalachian counties are more likely to experience multiple ACEs
   - Exposure to ACEs results in economic burdens to individuals, families and society, including impacts on both the public and private sector
2. **Specific ACEs have more substantial impacts**
   The following ACEs were found to have significant health and substantial cost impacts on Ohioans: Emotional abuse, sexual abuse and living in a household with someone who has a substance use disorder, mental health problem or who is incarcerated
3. **Preventing ACEs can improve health and reduce healthcare and other spending**
   Negative health outcomes and a significant amount of healthcare spending could be prevented if ACEs exposure were eliminated. For example:
   - 36% of depression diagnoses in Ohio could be prevented
   - Ohioans could save over $1 billion annually in public and private healthcare and related spending if just 10% of the cost attributable to ACEs exposure were avoided

Figure 2. **What is considered an ACE?**

Abuse	Household challenges	Neglect
• Emotional abuse • Physical abuse • Sexual abuse	• Witnessing domestic violence • Substance use in the household • Mental illness in the household • Parental separation or divorce • Incarcerated member of the household	• Emotional neglect • Physical neglect

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention

toxic stress and adversity.[4] These factors promote resilience, or the ability to withstand, adapt to and recover from adversity (see figure 3 for examples).[5] Studies have shown that people with higher levels of resilience are less likely to experience health problems caused by ACEs.[6] For example, the long-term consequences of ACEs can be mitigated by the presence of an adult – such as a parent, grandparent, caregiver, teacher or mentor – who makes a child feel safe and protected.[7] Research indicates that protective factors can effectively mitigate the harmful effects of ACEs even for children who have been exposed to four or more ACEs.[8]

Risk factors are circumstances or conditions that increase a child's likelihood of being exposed to an ACE. Risk factors can occur at the individual, family and community levels (see figure 3 for examples). These factors may not directly cause ACEs but can contribute to environments where exposure to adversity is more likely.[9] For example, researchers found that having a father who experienced significant childhood adversity (four or more ACEs) or having low family income increased male children's odds of experiencing four or more ACEs by 53% and 84%, respectively.[10]

How can ACEs be prevented and mitigated?

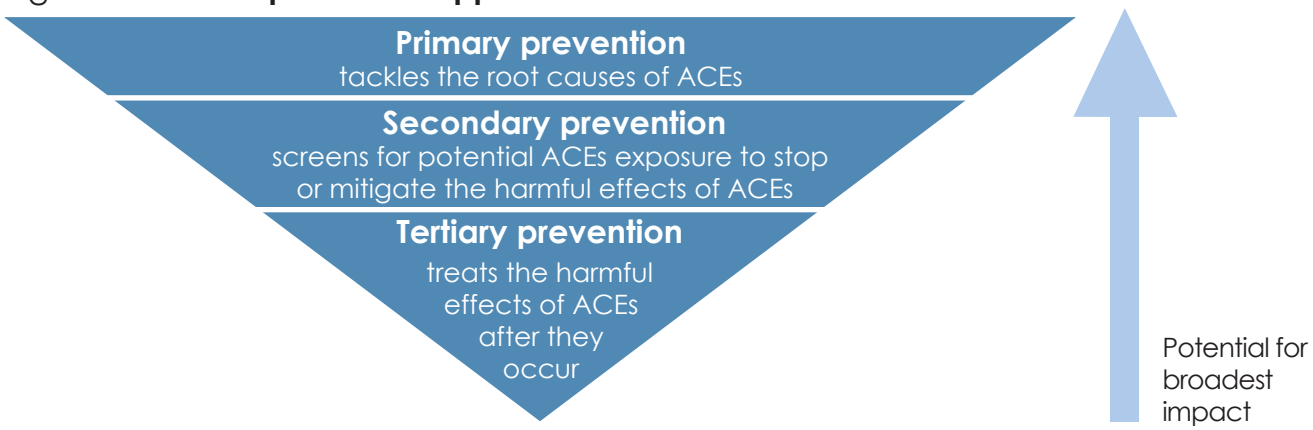
Approaches to prevent and mitigate the impacts of ACEs typically fall into three categories: primary prevention (i.e., tackling root causes), secondary prevention (i.e., screening) and tertiary prevention (i.e., clinical treatment). These categories or prevention levels are based upon the timing of the prevention approach relative to exposure to an ACE. Figure 4 emphasizes that primary prevention strategies have the broadest potential for impact because they are intended to reach children before they are exposed to and at risk for experiencing the negative consequences of ACEs.

Figure 3. **Examples of risk and protective factors for ACEs**

	Risk factors	Protective factors
Community	• Communities with limited education and economic opportunities • Communities with high rates of violence and crime • Communities with easy access to drugs and alcohol	• Communities with healthcare providers • Communities with safe and affordable housing • Communities with high-quality childcare and early childhood education providers
Family and peers	• Caregivers who experienced ACEs as children • Families living in poverty • Caregivers with limited understanding of children's needs or development	• Caregivers who provide safe, stable and nurturing relationships • Families who can meet basic needs • Positive friendships and peer networks
Individual	Children who do not feel they can share their feelings with their caregivers	Children who develop healthy social and emotional skills

Source: Modified from: "**Risk and Protective Factors.**" Centers for Disease Control and Prevention. Accessed May 17, 2021.

Figure 4. **Levels of prevention approaches for ACEs**



Primary prevention strategies address the underlying reasons for adverse and traumatic events ***before*** they occur. They can be implemented as programs or policy and system changes and often focus on changing social, economic and physical environment conditions to promote protective factors and reduce risk factors for ACEs (see figure 5).

Conversely, secondary and tertiary prevention of ACEs generally include screening and clinical treatment programs that are implemented ***after*** exposure to one or more ACEs has occurred.[11] Both screening and clinical treatment strategies have the potential to mitigate the short and long-term consequences of being exposed to adversity and trauma.

Secondary prevention, or screening for ACEs, can be conducted by using assessment tools and questionnaires, such as the Pediatric ACEs and Related Life-events Screener (PEARLS), to detect a history of adverse events as well as risk and protective factors. These tools, most often administered within a clinical care setting, identify individuals who have been exposed to ACEs and could benefit from specific interventions, such as education, safety planning and clinical treatment.

Tertiary prevention, or clinical treatment, is focused on reducing the negative health and/or social effects a person may experience once they have been exposed to ACEs. This includes providing therapeutic services to treat the effects of trauma and reduce repeated incidences of child abuse and neglect. For example, **child-parent psychotherapy**, provided to children under the age of five who have experienced adversity and to their caregivers, can treat the effects of trauma, improve child mental health and reduce incidences of domestic violence.

Figure 5. **Examples of primary prevention strategies**

Primary prevention strategies	**Prevention impact on ACEs**, including reducing ACE risk factors and promoting protective factors
Programs	
Dating Matters, a comprehensive teen dating violence prevention program	Reduces physical and sexual violence, alcohol and substance use and delinquency
Triple P (Positive Parenting Program System), a system of 5 levels of education and support for parents and caregivers of children and adolescents	Improves child behavior and parents' skills and reduces child abuse and neglect
Policy and system changes	
Expanding the Ohio **Earned Income Tax Credit** and making it refundable	Improves family income and employment and reduces poverty and intimate partner violence
Alcohol taxes	Reduces underage drinking, alcohol-related harms and sexual violence

Children of parents who have been exposed to ACEs are at an increased risk of ACEs exposure themselves.[12] As a result, a secondary or tertiary prevention strategy that effectively mitigates the harmful effects of ACEs may also reduce or prevent the potentially negative impacts of ACEs that carry forward across generations. Strategies like **parent-child interaction therapy** can reduce parental depression, emotional distress and substance use, which can, in turn, improve parent-child relationships and reduce future instances of child abuse and neglect.

What is trauma-competent care?

Providing trauma-competent care is an integral part of any approach to mitigating the impacts of ACEs. Trauma-competent care requires providers to explicitly acknowledge and be grounded in a firm understanding of an individual's history with trauma, including abuse, neglect, racism, discrimination and violence. This understanding must then be integrated into a provider organization's culture and should result in the provision of comprehensive and responsive trauma supports and services to the individual.

Trauma-competent care can be offered in multiple settings, including schools, hospitals and correctional facilities. Key approaches to providing trauma-competent care include:

- Patient-centered communication, which is based on a compassionate, non-judgmental communication style that seeks to decrease patients' stress and improve providers' relationships with patients
- Interprofessional collaboration among providers to ensure patients' easy access to referral and educational materials on trauma[13]

Ohio has implemented two strategies to move towards trauma competency: Ohio trauma-informed treatment models and the Ohio Trauma-Informed Care Certification program.

Ohio trauma-informed treatment models

State agencies in Ohio have embraced the integration of trauma-informed treatment models into behavioral health care. The Ohio Department of Mental Health and Addiction Services (OhioMHAS) and the Ohio Department of Developmental Disabilities (DODD) currently collaborate on a statewide trauma-informed care (TIC) initiative that encourages behavioral health providers, facilities and agencies to become competent in trauma-informed interventions. Additionally, OhioMHAS and the Ohio Department of Job and Family Services (ODJFS) require Qualified Residential Treatment Programs (QRTPs) — child-serving facilities eligible for certain federal funding based on meeting certain requirements — to apply for consideration as a trauma-informed treatment model. QRTPs are residential facilities certified by ODJFS that accept children with complex behavioral health needs and may qualify for federal funding after a child's first two weeks in that setting.

A full list of approved trauma-informed treatment models can be found **here**. Trauma-informed treatment models:

- Include programs, organizations and systems that are trauma-informed
- Realize the widespread impact of trauma and understand potential paths for recovery
- Recognize the signs and symptoms of trauma in clients, families, staff and others involved with the system
- Respond by fully integrating knowledge about trauma into policies, procedures and practices and seek to actively resist re-traumatization[14]

Ohio trauma-informed care certificate program

The Ohio Trauma-Informed Care Certificate demonstrates knowledge and skill development in trauma-informed competencies as established by ODJFS and OhioMHAS. Professionals in the social or human services fields can achieve three levels of certification, beginning at trauma aware and working up to trauma competent. The Ohio Trauma-Informed Care Certificate is designed to improve a professional's response to children, families and others who have experienced trauma and the impact of ACEs. The program is free and available online through the **Ohio Professional Registry (OPR)**.

Secondary and tertiary prevention, through screening and clinical treatment, are often the first strategies deployed to address ACEs. While these strategies are critically important to mitigate the negative impacts of ACEs, they alone are not sufficient. Significantly reducing the number of children in Ohio that are exposed to ACEs and their detrimental impacts requires placing a stronger focus on primary prevention and tackling the underlying causes of ACEs.[15] As discussed in prior briefs from HPIO's **Ohio ACEs Impact project**, preventing ACEs from occurring in the first place can result in substantial health and economic benefits for Ohioans.

What types of strategies can prevent and mitigate the impacts of ACEs?

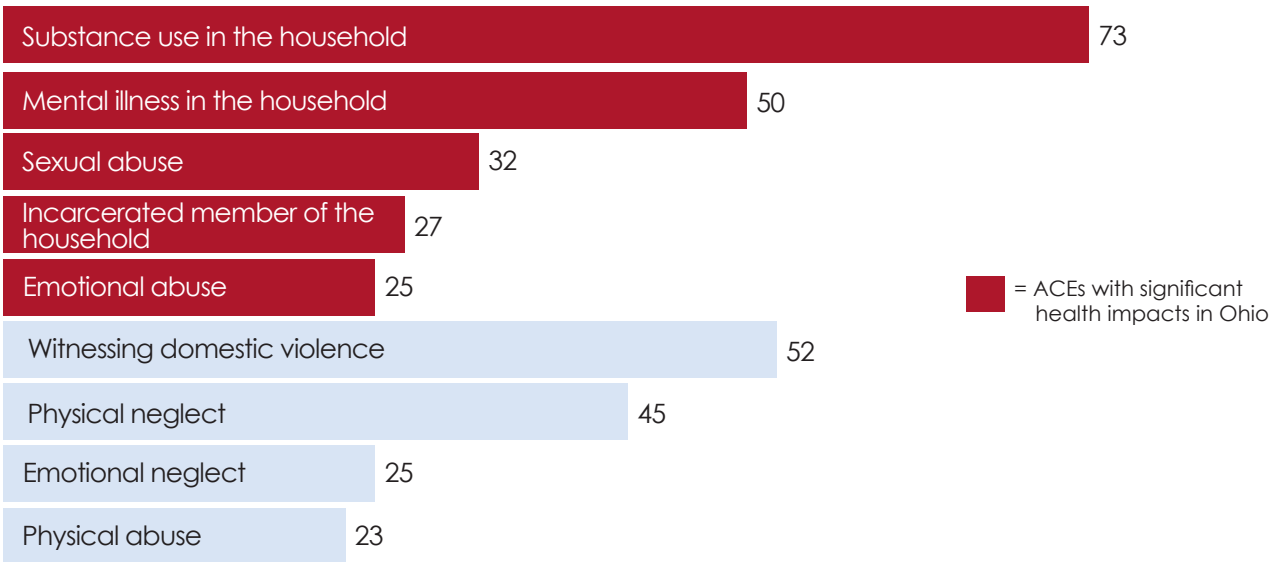
HPIO compiled an inventory of evidence-informed programs, services and policies that have been evaluated to be effective at preventing or mitigating the impacts of one or more ACEs. A complete list of the evidence-informed strategies is available in the **ACEs strategy inventory**.

Inventory process and methodology

To compile the strategy inventory, HPIO researchers relied on the following evidence registries and systematic reviews:

- **What Works for Health**, County Health Rankings and Roadmaps
- **The Guide to Community Preventive Services (Community Guide)**, Centers for Disease Control and Prevention (CDC)
- **HI-5 (Health Impact in Five Years)**, CDC
- **Social Programs that Work**, Arnold Ventures
- **Recommendations**, U.S. Preventive Services Task Force
- **Preventing Adverse Childhood Experiences (ACEs): Leveraging the Best Available Evidence**, CDC
- Technical Packages for Violence Prevention (**Intimate partner violence, sexual violence, youth violence** and **child abuse and neglect**), CDC
- **Title IV-E Prevention Services Clearinghouse**, Administration for Children and Families, U.S. Department of Health and Human Services
- **Preventing and Mitigating the Effects of Adverse Childhood Experiences**, National Conference of State Legislatures

Figure 6. **Number of evidence-informed strategies included in the ACEs strategy inventory, by type of ACE*** (n=186 strategies)



Note: The bars add up to more than the total number of evidence-informed strategies included in the inventory (186) because many strategies can impact multiple ACEs.
*No evidence-informed strategies were identified to prevent or mitigate harm associated with parental separation or divorce.

HPIO searched the evidence registries and systematic reviews for strategies with expected outcomes related to preventing and mitigating ACEs (e.g., reduced child maltreatment, reduced intimate partner violence). A total of 186 strategies with strong evidence of effectiveness in preventing or mitigating the impacts of ACEs were compiled and included in the inventory. Figure 6 displays the number of evidence-informed strategies included in the inventory that were found to impact specific ACEs.

For more information about the methodology, please see the **appendix**.

What strategies can have the largest impact in Ohio?

The Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control, **FY2021-FY2024 Adverse Childhood Experiences Prevention Strategy** provides a comprehensive framework of six strategy approaches to prevent and mitigate the long-term impacts of ACEs:

- Ensuring a strong start for children
- Strengthening economic supports for families
- Promoting social norms that protect against violence and adversity
- Enhancing skills so that parents and youth can handle stress, manage emotions and tackle everyday challenges
- Connecting youth to caring adults and activities
- Intervening to lessen immediate and long-term harms

Using the CDC strategy framework as a guide, HPIO identified 12 key evidence-informed, primary prevention strategies with a positive cost-benefit ratio that can be implemented in Ohio to reduce the substantial health and economic costs related to ACEs. Figure 7 highlights these key strategies and alignment with the CDC framework.

What is a cost-benefit ratio?

A cost-benefit ratio estimates the social benefit of a strategy relative to the strategy's social cost. Social benefits and social costs include the market (e.g., wages, taxes, productivity, healthcare costs) and nonmarket (e.g., quality of life, knowledge, skills, disability- or quality-adjusted life years) costs and benefits of a strategy. In other words, the benefits and costs are the economic, social, and environmental effects of a strategy in monetary terms.

Strategies with a cost-benefit ratio greater than $1 have an expected positive net benefit and strategies with a cost-benefit ratio of less than $1 have an expected negative net benefit. A strategy with an estimated cost-benefit ratio of greater than $1 should generate benefits greater than the costs. For example, early childhood education programs for low-income families have an estimated cost-benefit ratio of $4.33. This means that, for every $1 of social costs, these programs return an estimated $4.33 of social benefit.

Cost-benefit ratios provide state policymakers and other stakeholders with important information on the relative economic and social value of a strategy. Considering cost-benefit ratios is particularly important when faced with multiple effective policy and program options that can be implemented with limited resources. It is important to note, however, that cost-benefit ratios are only one of several factors to consider when making decisions about strategies. Other factors, such as extent of impact, community fit and feasibility are also important to consider.

For additional information on how the cost-benefit ratio was identified for strategies listed in figure 7 and potential limitations to the analysis, see the **appendix**.

Key strategies identified in figure 7 were prioritized from the comprehensive inventory of **186 strategies** to address ACEs, compiled by HPIO, using the following criteria:

- Demonstrates positive cost-benefit ratio (see "What is a cost-benefit ratio?" on page 7)
- Focuses on primary prevention of ACEs exposure as opposed to screening and clinical treatment
- Impacts multiple ACEs, including at least one ACE that has significant health impacts on Ohioans, as identified in HPIO's **first ACEs brief** (emotional and sexual abuse and living in a household with someone who has a substance use disorder, mental health problem or who is incarcerated)

Many of the key strategies focus on early intervention because early action can be particularly cost beneficial, helping children live healthy lives and reducing future public and private healthcare and other spending.

Figure 7 also identifies key equity strategies, where evidence suggests the strategy is likely to reduce inequities and/or disparities. Strategies without an equity symbol in figure 7 may also reduce inequities and disparities if they are culturally adapted and tailored; and resources are allocated to meet the needs of communities most at risk for ACEs exposure.

Public and private partners across the state are implementing many of the 12 key strategies to address adversity and trauma in children, supported by federal grants, state general revenue fund (GRF) dollars, private-sector funding and philanthropy. However, the extent to which these strategies are funded and implemented across the state and in communities most at risk is unclear. Additional analysis that assesses the implementation of these strategies in reaching Ohioans in need would be helpful to inform a comprehensive and coordinated response to ACEs prevention.

How can strategies be implemented to reach Ohio's most at-risk children?

Ohioans of color and Ohioans with low incomes, with disabilities and/or who live in urban and Appalachian areas of the state are more likely to experience multiple ACEs.[16] As described in **Health Impact of ACEs in Ohio**, these disproportionate effects stem from and can be exacerbated by experiencing racism, discrimination and multigenerational poverty. State policymakers and local-level partners can take the following action steps to safeguard the health and well-being of Ohio's children and families most at-risk for ACEs exposure:

- Authentically engage communities most at risk for experiencing adversity and trauma in efforts to prevent ACEs
- Understand current and historical community context that may bolster or impede efforts to address ACEs among at-risk children and families, including explicitly acknowledging and dismantling the profound impacts of racism and other forms of discrimination (such as ableism, xenophobia, homophobia, etc.)
- Ensure resources are allocated and strategies are adapted, tailored and implemented to advance the health of at-risk children and families
- Reduce participation or engagement barriers that may prevent children and families most at risk for ACEs exposure from reaping the full benefits of a strategy (i.e., childcare, transportation, cultural/linguistic or accessibility barriers)
- Evaluate how a policy or program was implemented and whether it was effective in eliminating disparities and inequities

By taking these steps, leaders can ensure that communities across the state are equipped to support children and families that are most at-risk for experiencing adversity and trauma.

Figure 7. **12 key strategies to prevent and mitigate the impacts of ACEs**

	Key strategy	Specific policy or program example(s)	Cost-benefit ratio	ACEs with significant health impacts* addressed by the key strategy				
				Emotional abuse	Sexual abuse	Mental illness in the household	Substance use in the household	Incarcerated member of the household
 **Ensuring a strong start for children**	Early childhood education programs	**Child-Parent Centers** (preschool program), a program that provides comprehensive educational, family support and healthcare services to economically disadvantaged children	$10.83[1]					
		Early childhood education programs for low-income families	$4.33[2]					
	Early childhood home visiting	**Early childhood home visiting programs**	$1.03-$20.82[3]					
 **Strengthening economic supports for families**	Medical-legal partnerships	**Medical-legal partnerships**	$6.98					
	Family income supports	Expanding the Ohio **Earned Income Tax Credit** to 30% of the federal credit and making it refundable	$1.75					
 **Promoting social norms that protect against violence and adversity**	Community-based violence prevention	**Alcohol taxes** (20% increase)	$9.30[4]					
		Green Dot, a violence prevention strategy that trains bystanders to prevent violence and shift social and cultural norms	$8.04[5]					

Figure 7. **12 key strategies to prevent and mitigate the impacts of ACEs** (cont.)

	Key strategy	Specific policy or program example(s)	Cost-benefit ratio	ACEs with significant health impacts* addressed by the key strategy				
				Emotional abuse	Sexual abuse	Mental illness in the household	Substance use in the household	Incarcerated member of the household
 **Enhancing skills so that parents and youth can handle stress, manage emotions and tackle everyday challenges**	School-based violence, bullying and intimate partner violence prevention programs	**Dating Matters**, a comprehensive teen dating violence prevention program	$34.90					
		Positive Action, a curriculum to improve school climate and social and emotional learning	$29.32					
	Parent/caregiver and family skills training	**Parent-Child Interaction Therapy**, for families in the child welfare system	$15.11					
		GenerationPMTO, a family training program that aims to teach effective family management skills to prevent antisocial and problematic behavior in children	$9.30					
		Triple P (Positive Parenting Program System), a system of 5 levels of education and support for parents and caregivers of children and adolescents	$7.78					
		Incredible Years (parent training program), a program focused on strengthening parenting competencies and fostering parent involvement in children's school experiences	$5.65[6]					
		Strengthening Families Program, a family skills training program that aims to reduce behavior problems and substance use	$5.36					
		Brief Strategic Family Therapy, a prevention and treatment model for families with children who display or are at risk of problem behaviors	$2.25					
	School-based social and emotional instruction	**Second Step**, a social skills program for reducing aggressive behavior in elementary and middle school-aged students	$4.78					

Figure 7. **12 key strategies to prevent and mitigate the impacts of ACEs** (cont.)

	Key strategy	Specific policy or program example(s)	Cost-benefit ratio	ACEs with significant health impacts* addressed by the key strategy				
				Emotional abuse	Sexual abuse	Mental illness in the household	Substance use in the household	Incarcerated member of the household
Connecting youth to caring adults and activities	Mentoring programs for delinquency ⚌	Community-based **mentoring programs focused on reducing delinquency**, for children exhibiting disruptive behavior	$2.50					
Intervening to lessen immediate and long-term harms	Drug courts	**Drug courts** (general)	$53.66					
		Family treatment drug courts	$2.10					
	Trauma-informed care	**Seeking safety**, a counseling model to help people attain safety from trauma and/or substance abuse	$44.85					
		Treatment Foster Care Oregon (for justice-involved youth), an intensive foster care alternative to institutional placement for youth with severe emotional and/or behavioral problems	$4.29					
	Behavioral health treatment	**Multisystemic therapy** (for justice-involved youth), an intensive treatment for youth who were incarcerated with possible substance abuse issues and their families	$3.02[7]					

*There is evidence that the strategy and/or one or more of the program examples prevents or mitigates the harmful effects of exposure to the specific ACE listed in the column.

⚌ There is evidence that the strategy and/or one or more of the program examples reduces disparities and inequities.

1. Cost-benefit ratios were also identified for the school-age program ($3.97) and the extended program (4 to 6 years of participation) ($8.24).
2. The cost-benefit ratio for universal early childhood education was positive ($3.15), yet slightly lower than the cost-benefit ratio for early childhood education for low-income families ($4.33).
3. Cost-benefit ratios were identified for several different types of home visiting programs, including positive cost-benefit ratios for SafeCare ($20.82), Nurse Family Partnership ($1.37), Healthy Families America ($1.43) and "other prenatal home visiting programs" which includes Healthy Start ($16.78). General home visiting for at-risk families had a positive yet lower cost-benefit ratio ($1.03). Parents as Teachers had a negative cost-benefit ratio ($0.18).
4. There was a positive, yet lower cost-benefit ratio identified for a 30% increase in alcohol taxes ($6.40).
5. Cost-benefit ratio is based on an evaluation of a Green Dot high school program.
6. Only the cost-benefit ratio for parent training programs is included in this table. The cost-benefit ratio for both parent and child training had a negative cost-benefit ratio (-$0.22).
7. Positive cost-benefit ratios were also identified for multisystemic therapy programs specific to sexual abuse ($1.55), substance use ($1.58) and for justice-involved youth and family integrated transitions (i.e., youth returning to the community after confinement) ($1.17).

Note: This figure provides examples of key strategies based on HPIO's prioritization process and the availability of research data; it is not an exhaustive list of strategies. For more information on HPIO's prioritization process and cost-benefit data sources, see the **appendix**.

Conclusion

Many of Ohio's public and private leaders have demonstrated a commitment to ensuring the well-being of children and families across the state. However, to become a national leader in child health and well-being, Ohio policymakers and other partners must align on a comprehensive and strategic approach to preventing ACEs. As highlighted in this brief, such an approach requires:

- Promoting protective factors and reducing risk factors for ACEs
- Focusing on primary prevention to prevent ACEs from occurring in the first place
- Targeting and tailoring interventions to ensure they reach children and families that are most at risk for experiencing adversity and trauma

This brief also highlights 12 key strategies that have strong evidence for preventing ACEs with significant health impacts on Ohioans and that are cost beneficial. As state policymakers and other partners make decisions on where to allocate resources in efforts to combat ACEs, these 12 key strategies can maximize the effectiveness of public and private spending and provide a roadmap for moving Ohio forward. Assessing the extent to which Ohio has made progress on implementing these strategies will be a critical next step to ensuring Ohio is on the right path towards improved health and well-being for all children and families in the state.

Acknowledgments

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Ohio ACEs Impact project

Led by the Health Policy Institute of Ohio (HPIO) and informed by a multi-sector advisory group, the **Ohio ACEs Impact project** includes a series of three policy briefs and an **online resource page** to build on and amplify current efforts to address ACEs in Ohio.

Since August 2020, HPIO has published two policy briefs as part of this project, **Adverse Childhood Experiences: Health Impact of ACEs in Ohio** and **Adverse Childhood Experiences: Economic Impact of ACEs in Ohio.** This brief, the third in the series, builds on the previous two briefs by identifying evidence-informed and cost-beneficial strategies to mitigate the impacts of ACEs.

This project is funded by the Harmony Project, the Ohio Children's Hospital Association and HPIO's **core funders**.

Notes

1. *Adverse Childhood Experiences (ACEs): Health Impact of ACEs in Ohio*. Health Policy Institute of Ohio (HPIO), August 2020, and *Adverse Childhood Experiences (ACEs): Economic Impact of ACEs in Ohio*. Health Policy Institute of Ohio (HPIO), February 2021.
2. Health Policy Institute of Ohio. 2021 Health Value Dashboard™. April 2021.
3. Chang, Xuening et al. "Associations between adverse childhood experiences and health outcomes in adults aged 18–59 years." *PLOS One* 14, no. 2 (2019): e0211850. doi: 10.1371/ journal.pone.0211850; see also "Adverse Childhood Experiences (ACEs): What Are ACEs?" The Children's Bureau, U.S. Department of Health and Human Services. Accessed March 4, 2020. **https://www.childwelfare.gov/topics/preventing/preventionmonth/ resources/ace/**
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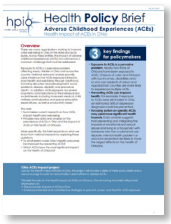
Adverse Childhood Experiences (ACEs)
online resource page

www.hpio.net/resource-page-ohio-adverse-childhood-experiences-aces-impact-project

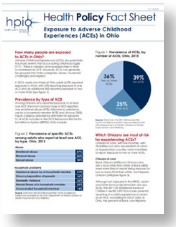
Previous HPIO ACEs publications



Policy brief

Adverse Childhood Experiences (ACEs): Health Impact of ACEs in Ohio

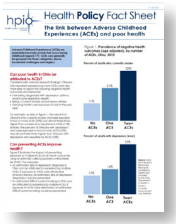
August 2020



Fact sheet

Exposure to Adverse Childhood Experiences in Ohio

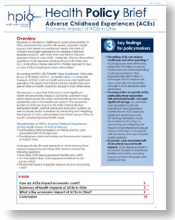
January 2021



Fact sheet

The link between Adverse Childhood Experiences and poor health

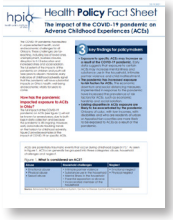
January 2021



Policy brief

Adverse Childhood Experiences (ACEs): Economic Impact of ACEs in Ohio

February 2021



Fact sheet

The impact of the COVID-19 pandemic on Adverse Childhood Experiences

March 2021

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