



Leading with

HOPE

Report on Health, Well-Being and
Childhood Experiences in Iowa

HOPE

The Science of Experiences, Drivers of

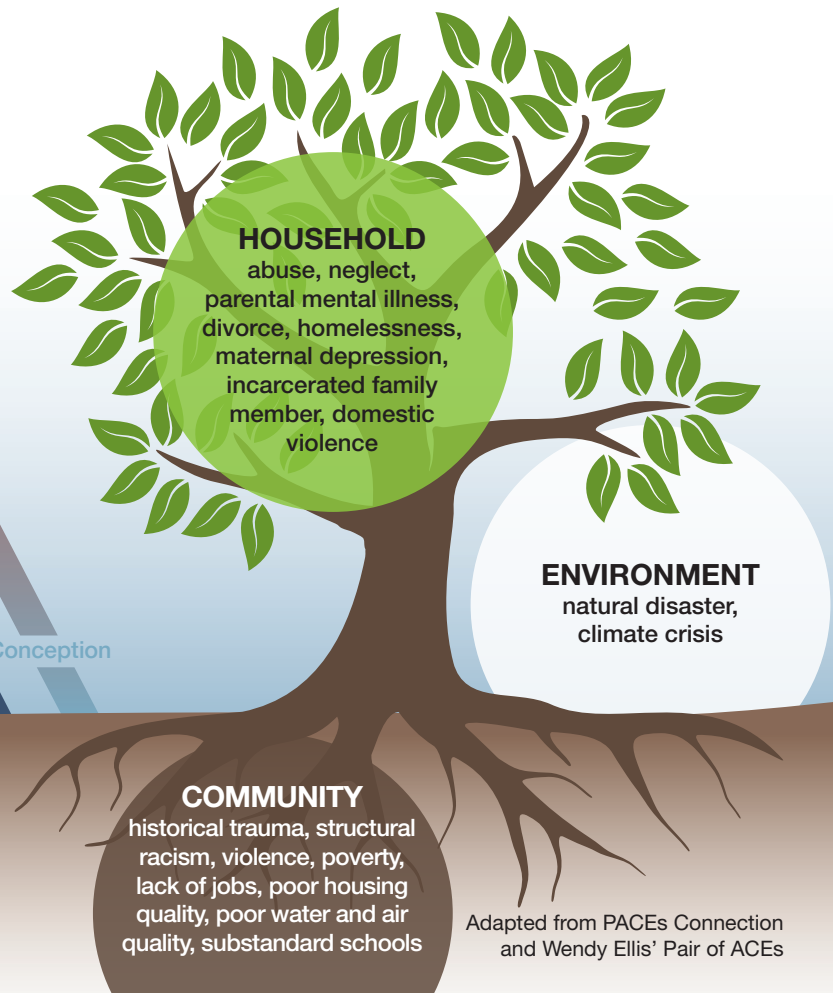
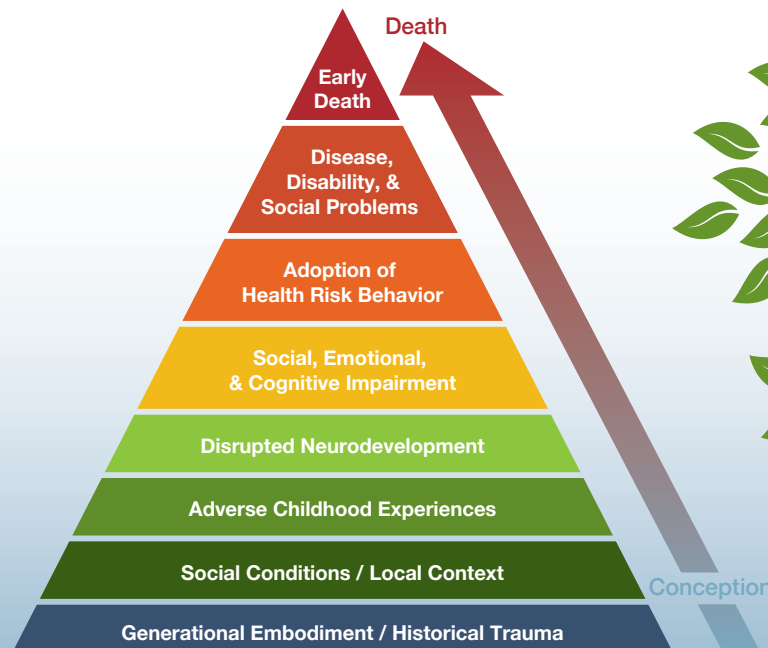
ADVERSE CHILDHOOD EXPERIENCES

Traumatic events that can dramatically upset a child's sense of safety and well-being

The social, economic, and health impact of Adverse Childhood Experiences (ACEs) is well-documented. According to the CDC, "ACEs-related illness accounts for an estimated \$748 billion in financial costs in North America" (2021). Reducing the incidence of ACEs would have a tremendous impact on the economy and on health and human service systems. Even more importantly, we must focus on **the impact that reducing ACEs and healing from trauma can have on the quality of life and well-being of real people and real families.** When we prevent ACEs, the estimated impact includes a 44% reduction in adults with depression, a 24% or greater reduction in adults with respiratory issues, and a 15% reduction in the number of adults who are unemployed (CDC, 2021).

Understanding how our experiences impact our health and well-being is an important foundation for creating conditions that help families thrive. A combination of nature and nurture guides our development: genes provide the basic blueprint for who we are, but it is our experiences and influences that shape how we think about ourselves and interact with the world. If we feel threatened, such as when we experience a traumatic event, our bodies help us respond by increasing our heart rate and blood pressure and delivering stress hormones throughout our body. When a child experiences stress that is powerful, frequent, prolonged, and/or unpredictable, it can become toxic. Their brain architecture and physical systems can be altered, and their development disrupted. Over time, this can impact how they react to their environment and their future health and well-being (Center on the Developing Child).

ADVERSE CHILDHOOD EXPERIENCES



Mechanism by which Adverse Childhood Experiences Influence Health and Well-Being Throughout the Lifespan. Adapted from CDC.

Adapted from PACEs Connection and Wendy Ellis' Pair of ACEs

POSITIVE CHILDHOOD EXPERIENCES

Safe, stable, nurturing relationships and environments in childhood

As we will highlight throughout the report, ACEs are linked to a number of health and well-being challenges. Yet that is not the end of the story. Just as adverse experiences can impact a child's development and future health and well-being, so too can positive experiences such as love, predictability, belonging, and connection. Growing research on Positive Childhood Experiences (PCEs) documents the benefits of "safe, stable, nurturing relationships and environments" to health and well-being, both for the general population and for those who have experienced ACEs (Huang et al., 2023; Merrick & Narayan, 2020). In the first nationally representative study on the relationship between PCEs and health outcomes in adulthood while accounting for ACEs, PCEs were associated with "improved health status and reduced overall mental or physical health condition risk," and the "strength of this association varies with an individual's ACE score" (Huang et al., 2023). Understanding the connection between positive and adverse childhood experiences and their impact on health offers hope for healing and inspires a sense of urgency to create the conditions that nurture positive experiences.

POSITIVE CHILDHOOD EXPERIENCES



Overview of Selected Data

Since 2012, Iowa has collected data on Adverse Childhood Experiences (ACEs) through the Behavioral Risk Factor Surveillance System, a voluntary, confidential phone survey conducted annually by Iowa HHS in partnership with the CDC. A decade later, we have a greater understanding of not only ACEs, but the relationship between ACEs and health, mental health, resiliency, social drivers of health, and health equity.

Data and research curation are important components in understanding the impact of trauma on health and well-being and determining what strategies can support the conditions for families to thrive. As research on childhood trauma, ACEs, and positive experiences gains more widespread knowledge, so does the variety of data sets and articles that can be referenced. In this report, you will find an overview of data points related to the health and well-being of Iowans. In determining which data and research to guide this report, we prioritized data sets that are primarily self-reported. While there is state and national data that includes current ACEs in children, such data is often parent/caregiver reported, especially for young children. Particularly for older youth, hearing directly from young people is significant, as "parents consistently reported higher perceived levels of their teenager's social and emotional support compared with the teenager's self-report" (Zablotsky et al., 2024). Parent/caregiver data certainly have an important role to play in prevention and early intervention. However, utilizing self-reported data supports the value of hearing directly from people as experts in their own lives.

In addition, the majority of data included were collected in the year 2020 or later to encapsulate the impact of the collective trauma known as the COVID-19 pandemic. COVID-19 impacted everyone; however, it did not impact all of us equally. The disparate impact of COVID from a racial, social, and economic perspective has been significant. : Data from 2020 or later allow us to include the compounding impact of COVID-19 on childhood and community trauma.

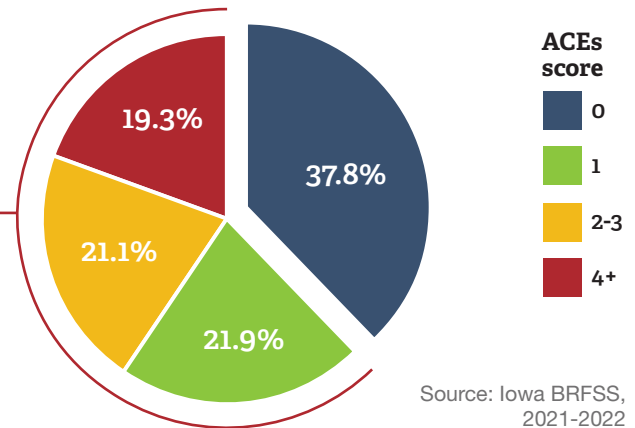


Adverse Childhood Experiences: Prevalence in Adulthood and Associated Risk

Adverse Childhood Experiences (ACEs) are common among Iowa adults. Analyzing the 2021-2022 ACEs data from the Behavioral Risk Factor Surveillance System, 62.2% of Iowa adults reported experiencing at least one type of child abuse or household stress before the age of 18.* More than 19.3% reported experiencing 4 or more ACEs; the percentage of Iowans who report 4 or more ACEs has trended upward over the decade Iowa has been collecting ACEs data (BRFSS).

PERCENT OF IOWA ADULT POPULATION REPORTING ACEs

62.2% of Iowa adults reported experiencing **at least one type of child abuse or household stress** before the age of 18*

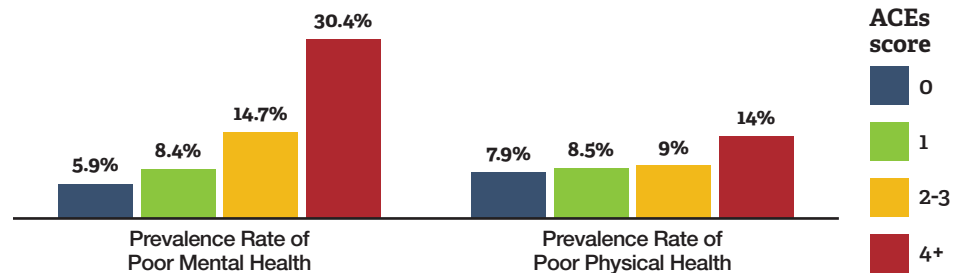


Source: Iowa BRFSS, 2021-2022

* The ACEs module within Iowa BRFSS has 11 indicators connected to the original ACEs collected in the Kaiser Study. Indicators reflect physical abuse, emotional abuse, sexual abuse, domestic violence, incarceration of a household member, divorce or separation of parents, and the presence of substance abuse or mental illness in the household. Neglect indicators are collected separately from the ACEs module in the BRFSS and are not included in this percentage.

The reported incidence of ACEs has a significant impact on the overall physical and mental health of adults, as is well-documented through research across the country. In Iowa, 14% of those reporting 4 or more ACEs report poor physical health, compared to fewer than 8% of those reporting 0 ACEs. Related to mental health and well-being, more than 30% of those reporting 4 or more ACEs view their mental health as poor, compared to fewer than 6% of those reporting 0 ACEs.

PREVALENCE RATE OF IOWA ADULTS REPORTING POOR PHYSICAL OR MENTAL HEALTH BY TOTAL NUMBER OF ACEs

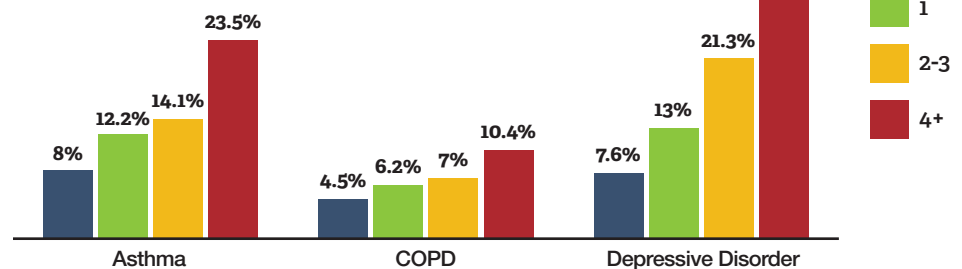


Source: Iowa BRFSS, 2021-2022

Consistent with previous analyses of Iowa data and with the compilation of research on ACEs across the country, current Iowa data continue to reflect a dose-response or stair-step relationship between the reported experience of ACEs and increased risk for a wide array of health and mental health concerns. For example, more than twice as many Iowa adults who report experiencing 4 or more ACEs report being diagnosed with chronic obstructive pulmonary disease (COPD) as those who report 0 ACEs. More than 40% of Iowa adults reporting 4 or more ACEs reported being diagnosed with a depressive disorder, compared to fewer than 8% of those reporting 0 ACEs.

HEALTH CONDITIONS OF IOWA ADULTS BY TOTAL NUMBER OF ACEs

Ever Diagnosed with:



Source: Iowa BRFSS, 2021-2022

For certain health conditions, age matters. For Iowa adults ages 18-64, more than 6% of those reporting 4 or more ACEs report a cardiovascular disease, compared to more than 3% of those reporting 0 ACEs. For Iowans ages 65 and older, there is no statistically significant difference in cardiovascular disease based on the number of reported ACEs.

A similar dose-response relationship exists concerning mental health concerns. Iowa adults who reported experiencing 4 or more ACEs reported anxiety and depressive symptoms at higher rates than those reporting fewer or no ACEs (BRFSS, 2021). While trauma is only one contributor to mental health concerns, it is important to consider in prevention and early intervention efforts.

As documented in several national studies, Iowa data highlight a relationship between ACEs and cigarette use as well as substance use. Use of cigarettes and e-cigarettes is reported in higher percentages for adults who reported 4 or more ACEs. Binge drinking and use of prescription opioids are reported in higher percentages for adults reporting 4 or more ACEs compared to those reporting 0 ACEs (BRFSS). According to the ACEs pyramid, these data points reflect health risk behaviors that may be adopted as a result of the social, emotional, and cognitive impact of ACEs.

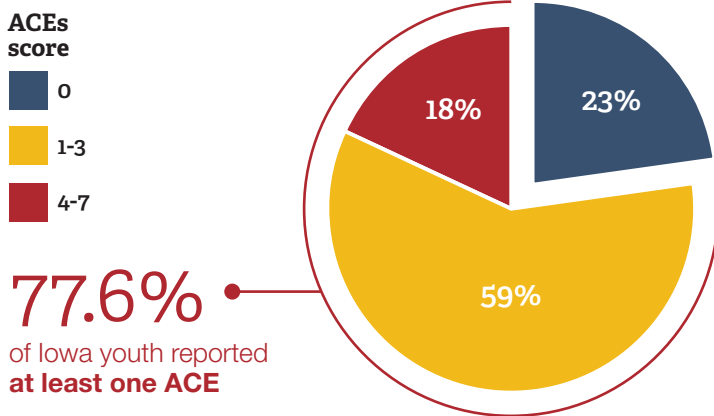
Youth Experiences and Associated Mental Health and Well-Being

As we look to the next generation of adults, Iowa youth data highlights that reported incidence of ACEs is higher. The Iowa Youth Risk Behavior Survey includes Iowa students grades 9-12, with analysis representative of Iowa students in public schools. In the 2021 findings, more than 77% of Iowa youth reported experiencing at least one ACE, with over 18% of Iowa youth reporting 4 or more ACEs.* The incidence is higher for youth representing marginalized communities. LGBTQ+ youth, multiracial youth, and those with a disability, all had higher rates of experiencing 4-7 ACEs than the total average (2021).

In the 2021 YRBS findings, the percentage of Iowa youth overall who reported persistent feelings of sadness and hopelessness increased over the past decade. This percentage, when influenced by the experience of childhood trauma, continues to rise.

Iowa youth data reflects that as the number of ACEs increases, the prevalence of depressive symptoms and poor mental health also increases. For youth experiencing 4-7 ACEs, over 80% reported feeling persistent sadness or hopelessness, and almost 68% reported poor mental health.

IOWA YOUTH REPORTING ACEs



Source: Iowa Youth Risk Behavior Survey (2021)
 *Neglect/unmet needs calculated separately

Youth who felt a closeness to people at school or the ability to talk to family and friends showed statistically lower prevalence rates of prolonged sadness or hopelessness.

Iowa YRBS, 2021

State and national data reflect the important influence that supportive relationships can have on youth well-being and positive experiences. In the 2021 Iowa YRBS, there were statistically lower prevalence rates of prolonged sadness or hopelessness among youth who felt a closeness to people at school or the ability to talk to family and friends. In a national survey of youth ages 12-17, over 58% reported having the social-emotional support they need (Zablotsky et al., 2024).



Intergenerational Impact of Trauma

HISTORICAL TRAUMA

The collective, multigenerational trauma and cumulative harm experienced by a specific cultural, ethnic, or racial group.

The prevalence of adverse childhood experiences and their connection to long-term health tell only part of the story of how trauma and stress can influence family well-being, especially over the course of generations. As reflected in the current ACEs pyramid from the CDC, we must look at the current stress and past experiences of our caregivers as well as the history of our ancestors. While each of us carries our own experiences, we also inherit the weight of our ancestors' adversity. This can influence our health today and how we interact with our environments.

When a birthing individual experiences stress, the flood of stress hormones can impact their current and postpartum health. Stress can also influence the health of the child through birth outcomes such as

preterm birth and low birth weight (Coussons-Read, 2013). According to Iowa PRAMS data, which looks at the health and well-being of new mothers before, during, and after birth, over 23% of women who gave birth from 2018-2021 experienced 3 or more stressors during the 12 months before their baby was born. The highest prevalence of 3+ stressors experienced by birthing mothers occurred in 2020, at the height of the pandemic.

To further improve outcomes and explicitly address disparities in maternal health, understanding the present-day impact of experiences rooted in historical trauma on birthing women of color is necessary. In Iowa, birthing individuals of color continue to be impacted by the historical legacy of racism and discrimination in maternal health, particularly in areas such as the quality of care and access to preventive care. According to a 2021 report by the Iowa Maternal Mortality Review Committee, "structural racism and/or discrimination were determined to be a contributing factor in 40% of the cases" of pregnancy-associated deaths.

Influence of Social Drivers of Health

SOCIAL DRIVERS (DETERMINANTS) OF HEALTH

are "the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." (Healthy People 2030)

The conditions that families experience can help alleviate stress or contribute to it. Social drivers of health are key to understanding how we can create conditions that help alleviate stress and support Iowa families.

Iowa data indicate that families are struggling in areas such as economic stability and health care access. More than 11% of Iowa students report not having basic physical needs met, which can include housing, food, clothing, education, and access to medical care (YRBS, 2021). In 2022, more than 15% of Iowa adults reported not having enough money to buy food when needed (BRFSS). This percentage was higher for women, adults of color, those who identified as LGBTQ+, and those with a disability. In addition, the percentage was higher for adults ages 54 or younger, key years where they may be serving as a primary caregiver. According to Feeding America (2024), 1 in 11 Iowa adults is food insecure and 1 in 6 Iowa children is food insecure.

There is also a relationship between financial stressors in adulthood and adverse experiences in childhood. Adults who report 4 or more

SOCIAL DETERMINANTS OF HEALTH



Source: cdc.gov

ACEs also report being unable to pay bills such as mortgage, rent, and utilities at higher rates than those who report 0 ACEs. The same is true when looking at whether adults had the resources to buy more food if needed (BRFSS, 2022).

By focusing on the social drivers of health for Iowa's families, we emphasize that conditions such as poverty, food insecurity, and financial stressors can be traumatic and also create a risk for additional trauma.

Leading with Hope: TAKING ACTION

Hope is an action. It is the belief that the future can be different and that we can do something about it. Building on national frameworks related to trauma and healing, three strategic areas create a vision that can increase opportunities for positive childhood experiences, reduce ACEs, and ultimately improve the health and well-being of Iowa's children and families.

1 Build and Nurture Strong Families

Safe, stable, and nurturing experiences in a child's life lay the foundation for future health, learning, and success. While caregivers play a central role in providing these experiences, they cannot do it alone.

True prevention starts before a child is born. Soon-to-be parents and expecting families often have significant stressors and unresolved trauma long before a new child joins the family. By ensuring parents get support and resources from the start of pregnancy, we can reduce stress and build a strong foundation for families.

When caregivers are healthy and well, they can focus on building strong relationships with their children. Two-generation programs and policies aim to support both parents and children together, understanding that helping one benefits the other. For example, home visiting programs can help break the cycle of trauma passed from one generation to the next. Children and families can be further supported by developing quality childcare and early education, with family engagement as a key component.

What works?

- ✓ Strengthened economic supports for families, such as food assistance and child tax credits
- ✓ Access to prenatal and maternal health and mental health supports
- ✓ Opportunities for paid leave and supportive workplace policies
- ✓ Prenatal and early childhood home visitation and care coordination services
- ✓ Quality childcare and early education with family engagement

2 Cultivate Safe, Stable, and Healthy Environments

Healthy, stable environments start at home and are influenced by the communities that surround them. Safe and healthy communities are built through supportive relationships, strong community ties, inclusive policy and practice, and equitable access to services. Such environments help prevent and mitigate the impact of stress and adversity, promote personal growth and coping skills, and foster opportunities for children and youth to learn and thrive.

Schools and academic settings are uniquely positioned to influence the well-being of Iowa's children and families and foster a sense of belonging. When schools recognize the impact of trauma and adversity, school policy and practice can help cultivate healthy and positive environments. Such environments are characterized by supportive relationships, psychological and physical safety, social-emotional support, inclusive engagement, and equitable practices.

What works?

- ✓ Healing-focused and inclusive communities
- ✓ Community-led solution development
- ✓ Trauma-informed educational environments that promote social-emotional well-being, collaboration with families and communities, and restorative discipline practices

3 Promote Trauma-Informed Services and Systems

Families and communities are impacted by the policies and practices of our organizations, systems, and government. When we ensure fair and equitable access to services, we all benefit through improved well-being, increased community safety and engagement, and greater hope for families and communities.

Providing trauma-informed and culturally specific health and mental health services is crucial for delivering effective, equitable, and respectful care. Such care promotes better outcomes, supports healing and reduces barriers to accessing necessary support. Additionally, services must be developmentally appropriate. There are unique developmental needs for infants and young children, as there are for adolescents. Access to intergenerational services can join each of these components to further support healing for the whole family.

Our organizations and systems must promote the well-being of the education, health, and human services workforce so that professionals can deliver the best care to children and families. Professionals are often serving Iowans who are experiencing complex barriers to their physical and mental wellness, while also managing their own personal stressors and need for healing. Trauma-informed organizations and systems can create a culture that prioritizes and values the health of the workforce.

What works?

- ✓ Trauma-informed and culturally appropriate services and supports
- ✓ Continuum of mental health services, especially for infants, children, and adolescents
- ✓ Family-centered and intergenerational treatment for substance use disorders
- ✓ Trauma-informed organizations that prioritize workforce health and well-being

The impact of ACEs research and the ACEs response movement is significant; we have certainly seen progress in Iowa's systems and communities. However, a major stakeholder has often been missing from data interpretation and solution development: children and families experiencing trauma.

Iowa ACEs 360 is committed to further understanding health, well-being, and childhood experiences through data co-interpretation. As we move forward, we will work with Iowa families, communities, and groups to take a deeper dive into the conditions and experiences influencing their health and well-being. In addition, community-led solution development will drive recommendations that build upon the overall strategies outlined in this report.

Thank you for your commitment to the health and well-being of Iowa's families and to the conditions they need to thrive.



To learn more about ACEs in Iowa and response strategies, visit www.IowaAces360.org

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Data and Works Cited

Center on the Developing Child, Harvard University. "Toxic Stress."

Centers for Disease Control and Prevention (2021). "Healthy childhoods have benefits throughout life."

Centers for Disease Control and Prevention (2021). "Positive childhood experiences improve the economy."

Coussons-Read, M. (2013). Effects of prenatal stress on pregnancy and human development: mechanisms and pathways. *Obstetric Medicine*, 6(2).

Feeding America (2024). Map the Meal Gap, 2022 Data.

Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., Koss, M., Marks, J. (1998). 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*.14:245–258

Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

Huang, C.X., Halton, N., Sastry, N., Chung, P., & Schickedanz, A. (2023). Positive childhood experiences and adult health outcomes. *Pediatrics*, 152(1).

Iowa Behavior Risk Factor Surveillance System (BRFSS), 2021-2022.

Iowa Department of Health and Human Services, Division of Strategic Operations, Bureau of Performance (2023). Iowa Youth Risk Behavior Survey: 2021 Findings.

Iowa Department of Public Health (2021). 2021 Maternal Mortality Review Committee Report.

Iowa Pregnancy Risk Assessment Monitoring System (PRAMS), 2018-2022.

Lopez, S. (2013). *Making Hope Happen: Create the future you want in business and life*. New York: Free Press.

Merrick, J. & Narayan, A. (2020). Assessment and screening of positive childhood experiences along with childhood adversity in research, practice, and policy. *Journal of Children and Poverty*, 26.

Narayan, A., Rivera, L., Bernstein, R., Harris, W., & Lieberman, A. (2018) Positive childhood experiences predict less psychopathology and stress in pregnant women with childhood adversity: A pilot study of the benevolent childhood experiences (BCEs) scale. *Child Abuse & Neglect*, 78 (p. 19-30).

Zablotsky, B., Ng, A., Black, L., Bose, J., Jones, J., Maitland, A., & Blumberg, S. (2024). Perceived social and emotional support among teenagers: United States, July 2021–December 2022. *National Health Statistics Reports*; no 206.