



Understanding Adverse Childhood Experiences in the Context of Chronic Kidney Disease and COVID-19

Social Determinants of Health (SDOH), the conditions in which people are born, grow, work, live, and age in, influence adult health. According to the World Health Organization, SDOH account for between 30-55% of health outcomes and they may predispose someone to having worse health outcomes, like diabetes, hypertension, and kidney disease.

Adverse Childhood Experiences, or ACEs, are stressful, negative, or traumatic events in a child's (0-17 years old) life. ACEs are a SDOH and have shown to increase the risk of adult mortality and morbidity. Science shows that these traumatic experiences can have long-term effects on a child's brain and body, often leading to physical, behavioral, and mental health problems.

ACE's are very common, and most American's have at least one. They are becoming a major public health concern and are worsening as a result of health, social, and economic repercussions of the COVID-19 pandemic.



ACEs Prevalence



Two-Thirds of Michigan adults (66%) reported having more than one ACEs and about **20% of adults had two or more** ACEs.

ACEs Impact

ACE load matters. ACEs are a risk factor for various health risk behaviors and conditions. Generally, the prevalence of these behaviors and poorer health outcomes is higher among people with ACEs than those without them.

The Impact of COVID-19

The COVID-19 pandemic has exacerbated underlying risk factors for ACEs and in some cases, caused risk factors to develop them. Throughout the pandemic:



4 in 10 U.S. adults reported symptoms of anxiety or depressive disorder



12% of adults reported worsening chronic conditions



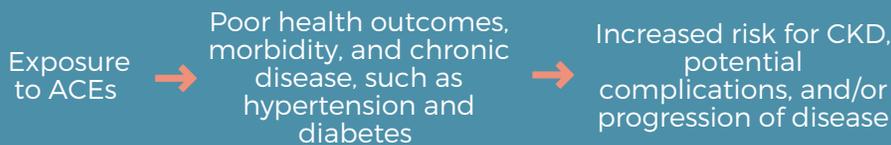
Food insecurity **doubled** for U.S. households

ACEs and Chronic Kidney Disease

Evidence suggests **individuals with a history of ACEs have higher odds of developing chronic kidney disease versus individuals with no adverse childhood experiences.**

More specifically, findings suggest that individuals with multiple ACEs and decreased renal function (DRF), or kidney function, have higher mortality risk compared to those without ACEs or DRF. These individuals *may* have more severe drops in survival compared to other groups. Additionally, having multiple ACEs and DRF may increase health vulnerabilities, leading to early mortality.

- **37 million** American adults have CKD
- **More than 16,000** people are on dialysis in Michigan
- **1 in 3** American adults, or **33%**, are at risk for kidney disease



If you have high blood pressure, diabetes, heart disease, are overweight, or have a family history of kidney disease, you may have a kidney condition. Learn more to see where you stand at kidneymi.org/kidneyquiz.

There is Hope

Resilience brings hope! Resilience is the ability to return to being healthy and hopeful after bad things happen. Research shows that resilience, in the face of adversity, can help people navigate life well and actively participate in preventing ACEs in the next generation.

Social support from friends, family, and the community can help buffer the negative effects of ACEs. In Michigan, adults with high levels of social support were 7% to 29% less likely to report negative health outcomes compared to those with low social support. Early recognition and screenings for ACEs has the potential to eliminate or reduce the negative health and behavior impacts individuals face.

The National Kidney Foundation of Michigan is building awareness and education on ACEs, chronic disease risk factors and complications, and the relationship between chronic kidney disease and COVID-19.

**For more information on this initiative, please contact:
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The Michigan ACE Initiative is focused on raising awareness about Adverse Childhood Experiences and developing trauma-informed, healing organizations and communities across the state. For more information, please visit www.miace.org.

What is CKD?

Chronic kidney disease, also known as CKD, is a condition characterized by a gradual loss of kidney function that continues for three months or more. When left untreated, CKD can lead to complete kidney failure. If that happens, the only options for survival are dialysis or a kidney transplant.

CKD Risk Factors



Diabetes



Hypertension



Are older



Family history of kidney failure



Belonging to a population group with a high rate of diabetes or high blood pressure