

Adverse Childhood Experiences (ACEs) and Smoking among Indiana Adults



Findings from the 2018 and 2019 Indiana BRFSS

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Introduction

Adverse childhood experiences (ACEs) are traumatic events (including abuse, household dysfunction, and neglect) that occur before the age of 18. Research has shown that ACEs increase the likelihood of participating in health-related risk behaviors (like smoking) that can lead to poor health outcomes in adulthood. Indiana maintains a higher smoking rate (19.4%) compared to the national average (15.5%) and is among the top ten states for smoking rates each year. This indicates the need for further insights to understand and address smoking behaviors.

In 2008, the Centers for Disease Control and Prevention (CDC) began offering states the opportunity to include eleven questions about ACEs exposure on the Behavioral Risk Factor Surveillance System (BRFSS). Indiana collected ACEs data using the BRFSS in 2018 and 2019. This study examined the relationship between ACEs exposure and smoking rates among Indiana adults using these data.

ACEs and Current Smoking

1-2 ACEs **1.22x higher***

3+ ACEs **1.95x higher***

*Compared to those who reported no ACEs, after adjusting for known confounders

Results from a multivariate logistic regression model demonstrate how exposure to ACEs is associated with an increased likelihood of smoking in adulthood.

Key Takeaways

The connection between ACEs and smoking highlights how ACEs are a significant public health concern, as people who have experienced multiple ACEs may be at increased odds of participating in certain health-related risk behaviors (like smoking) in adulthood. Further studies to improve the understanding of ACEs and their relationship to smoking can lead to more widespread efforts across Indiana to prevent both ACEs and their health implications. Strategies such as strengthening economic support for families, promoting social norms that protect against violence, and interventions to lessen immediate and long-term harms can help prevent ACEs.

64.7%

of Indiana adults reported experiencing at least one ACE

27.5%

of Indiana adults reported experiencing three or more ACEs

Fast Facts

Among Indiana adults in 2018/2019:

- **19.8%** reported smoking some days or every day
- **31.9%** with three or more ACEs reported smoking
- **12.4%** with no ACEs reported smoking
- The most prevalent ACE category was emotional abuse, with **35.6%** reporting exposure during childhood

For additional information on Indiana tobacco prevention and cessation: in.gov/health/tpc

For additional information on the Indiana Behavioral Risk Factor Surveillance System (BRFSS): in.gov/health/erc/data-analysis-and-risk-factors/behavioral-risk-factor-surveillance-system

