

# Research Brief

## Prebirth Household Challenges to Predict Adverse Childhood Experiences Score by Age 3

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### Background

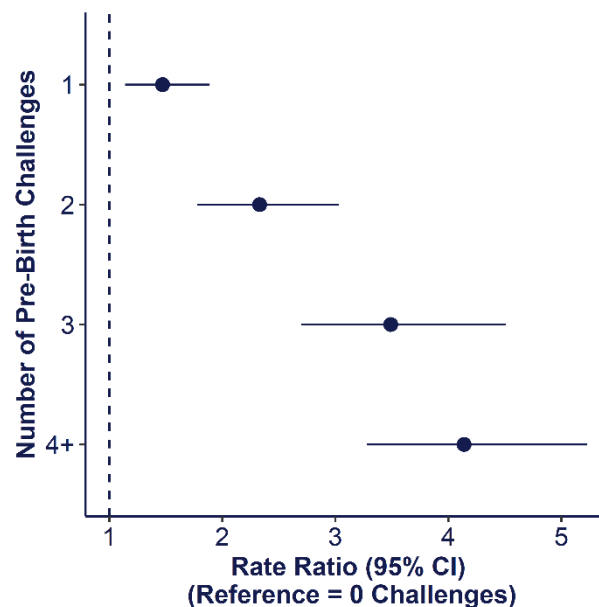
Exposure to adverse childhood experiences (ACEs) is associated with many poor health outcomes in adulthood, including major causes of death and mental illness. Due to these effects, the Centers for Disease Control and Prevention (CDC) recommends preventing ACEs before they occur, highlighting the need to find and address early predictors of ACEs.

Using the ALCANLink resource, the authors of this study linked the 2009-2011 Alaska Pregnancy Risk Assessment Monitoring System (PRAMS) data with 2012-2014 Alaska Childhood Understanding Behaviors Survey (CUBS) data and administrative data from the Office of Children’s Services (OCS). Using these longitudinal data, they examined the relationship between pre-birth household challenges reported by the mother approximately 12 months before birth and ACEs score of the child by age three years.

### Key findings from this study

- The number of pre-birth challenges reported and ACEs score had a graded, dose-response relationship (see Figure 1).
- Children born into homes reporting 4+ pre-birth household challenges were **4.1 times** as likely to have a higher average ACEs score by age 3 compared to those reporting 0 pre-birth challenges.
- Pre-birth challenges that were independently associated with elevated ACEs score of the child included:
  - Homelessness
  - Problems paying bills
  - Mother or partner went to jail
  - Mother was checked or treated for depression or anxiety

**Figure 1.** Relative Comparison of Expected Average ACEs Score at Age 3 Years by Number of Pre-Birth Household Challenge Components Reported



### Implications and recommendations

The number of pre-birth challenges experienced by the household is strongly associated with the accumulation of childhood ACEs. Addressing and reducing these household challenges during the pre-birth period may be an important method for ACEs prevention. Evidence-based, multidisciplinary strategies to strengthen the household unit during the pre-birth period should be implemented and tested.

