



**Adverse Childhood Experiences, Mental Health and Chronic Illness:  
Analysis of Maryland BRFSS Data**

**Background**

- The Behavioral Health Risk Factor Surveillance Survey (BRFSS) is a national population-based health behavior survey conducted annually by the Centers for Disease Control and Prevention (CDC) and administered by individual states
- In Maryland, approximately 13,000 non-institutionalized state residents, ages 18 and older participate in the BRFSS each year
- In 2009, the CDC added Adverse Childhood Experiences (ACEs) to the national survey, and in 2015 ACEs were collected as part of the MD BRFSS
- ACEs are potentially traumatic experiences occurring in the first 18 years of life. ACEs can include experiences of physical, sexual or emotional abuse; neglect; parental mental health or substance use problems, incarceration or divorce
- Prior studies have found that people who experience four or more ACEs are 1.6 times more likely to have diabetes, four times more likely to have depression, at least seven times more likely to have addiction, alcohol, or illicit drug use problems and 12 times more likely to have attempted suicide

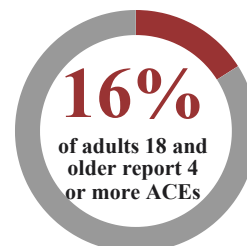
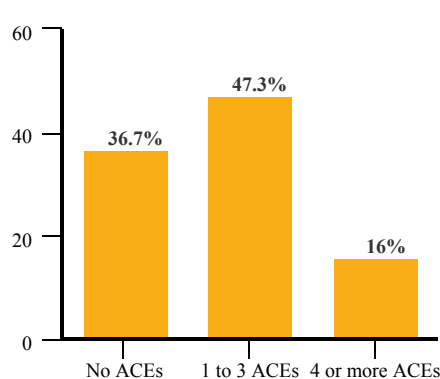
**Result Highlights**

- Nearly two-thirds (63.3 percent) of MD BRFSS survey participants reported experiencing one or more ACEs, with 16 percent reporting four or more ACEs (Fig. 1). Additionally, females were more likely to report four or more ACEs compared to males
- Adults with four or more ACEs were more likely to report higher rates of health risks, less education and lower rates of employment (Fig. 2)
- Almost 30 percent of adults with four or more ACEs reported 14+ days of poor mental health compared to four percent of those who reported no ACEs (Fig. 3)
- In examining quality of life, participants reporting 14+ days of poor mental health had higher health risks, lower rates of employment and less education than those with fewer days of poor mental health (Fig. 4). They were also more likely to report poorer physical health and more chronic illness (Fig. 5)

**Discussion**

- The results demonstrate an association between ACEs, quality of life and health outcomes for Maryland residents. Marylanders who use the Public Behavioral Health System are four times more likely to report 14+ days of poor mental and physical health than the general public
- The results highlight the need for improved care coordination and greater access to trauma-informed integrated approaches to the delivery of physical and behavioral health care services

Figure 1. ACEs Reported by Adults 18 and Older, BRFSS 2015



Females are more likely to report 4 or more ACEs compared to males

Figure 2. ACEs, Health Risks & Social Determinants of Health, BRFSS 2015

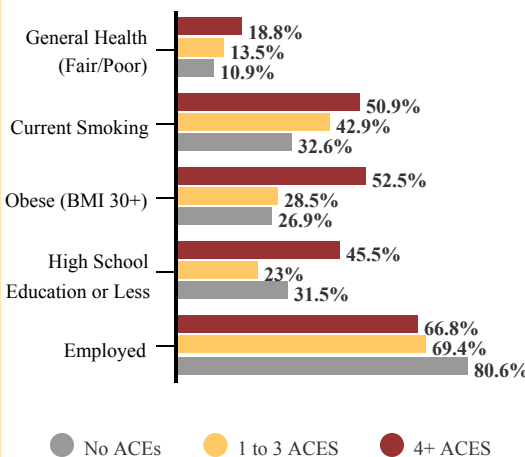


Figure 3. ACEs and Quality of Life Outcomes, BRFSS 2015

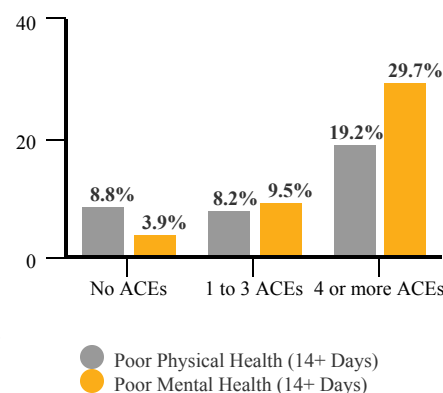


Figure 4. Mental Health Quality of Life, Health Risks & Social Determinants of Health, BRFSS 2015

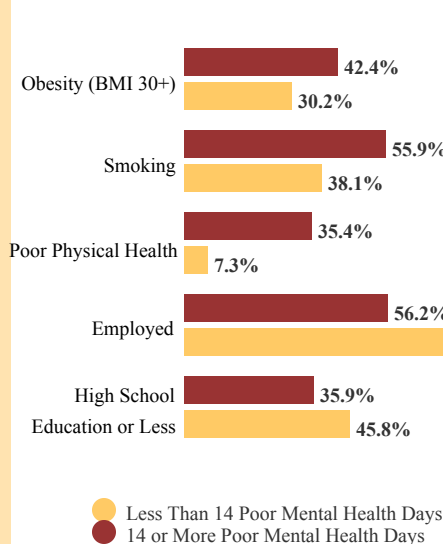


Figure 5. Mental Health Quality of Life & Chronic Illness, BRFSS 2015

