

Social Determinants of Health

Adverse childhood experiences

Early childhood experiences influence the developing brain, and adversity/trauma during sensitive periods of development can create toxic stress and interrupt normal brain development. Adverse childhood experiences (ACEs) are a root cause of many social, emotional, physical and cognitive impairments that lead to increased incidence of developmental delays and other problems in childhood¹, as well as adult health risk behaviors (e.g. smoking, alcoholism), mental illness (e.g. depression and suicide), diseases (e.g. heart disease, cancer, diabetes), disability, and premature mortality.² Understanding the prevalence and impact of ACEs can inform efforts to prevent trauma and promote individual, family and community resilience; as well as to create trauma informed systems and services.

The original ACEs study included abuse, neglect, and household dysfunction (household substance abuse or mental illness, parental divorce, incarcerated household member, exposure to domestic violence). Some ACEs scales also include other experiences such as historical trauma, discrimination, community violence or war, being a refugee, school violence and bullying, or experiencing severe social deprivation including poverty, hunger and homelessness.

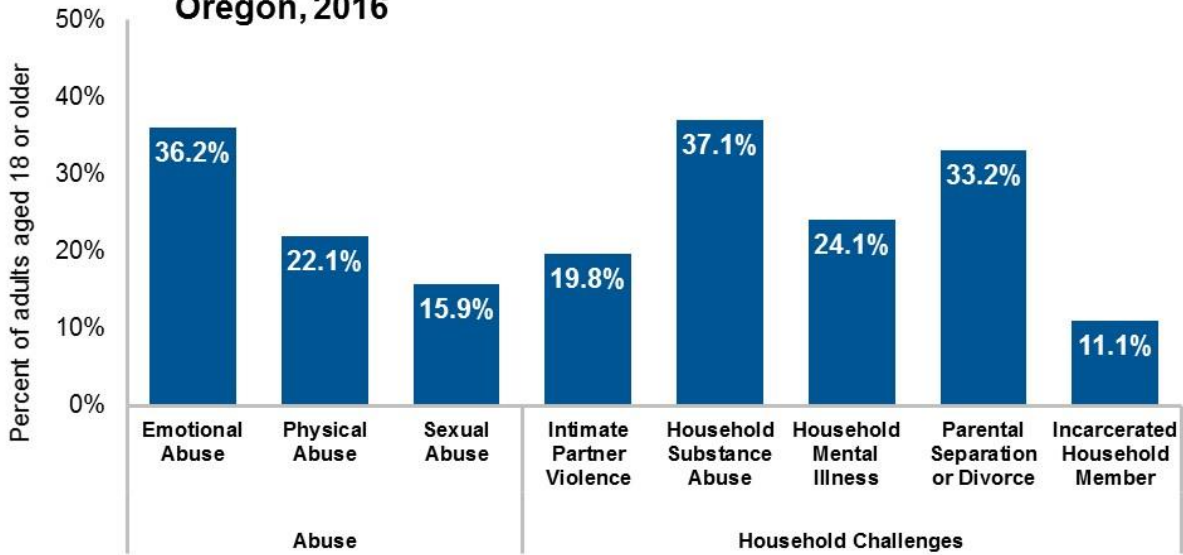
The most commonly reported types of adverse childhood experiences are household substance abuse (37.1%), emotional abuse (36.2%), and parental separation/divorce (33.2%; Figure 1).

¹ <http://46y5eh11fhgw3ve3ytpwxt9r.wpengine.netdna-cdn.com/wp-content/uploads/2015/05/inbrief-adversity-1.pdf>

² Felitti, Anda, Nordenberg et al. 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 of Prev Med, 1998

FIGURE 1

Types of ACEs among adults aged 18 years or older, Oregon, 2016

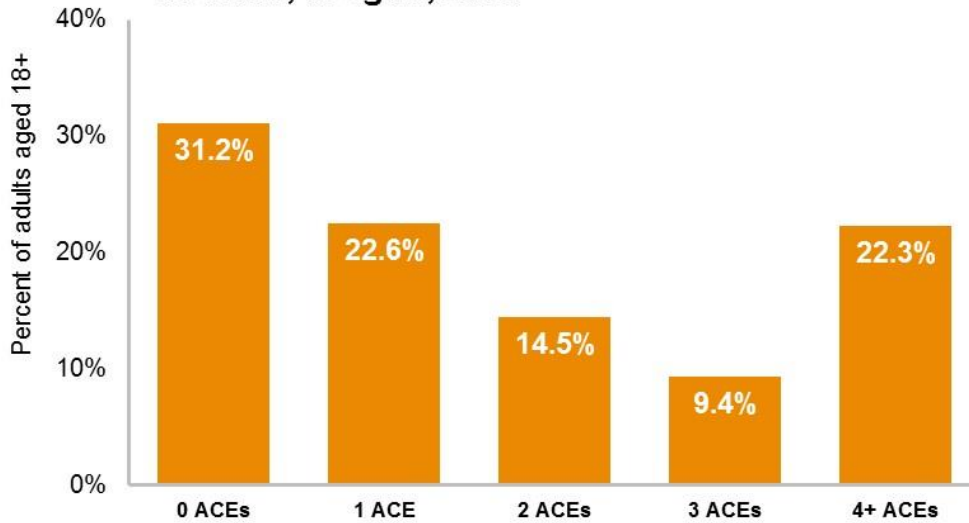


Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

ACEs are common and their related health impacts - beginning in childhood and continuing throughout the lifespan - increase with increasing number of ACEs³. 46.2% of Oregon adults experienced 2 or more ACEs during childhood, and 22.3% experienced 4 or more (Figure 2).

FIGURE 2

Number of ACEs among adults aged 18 years or older, Oregon, 2016



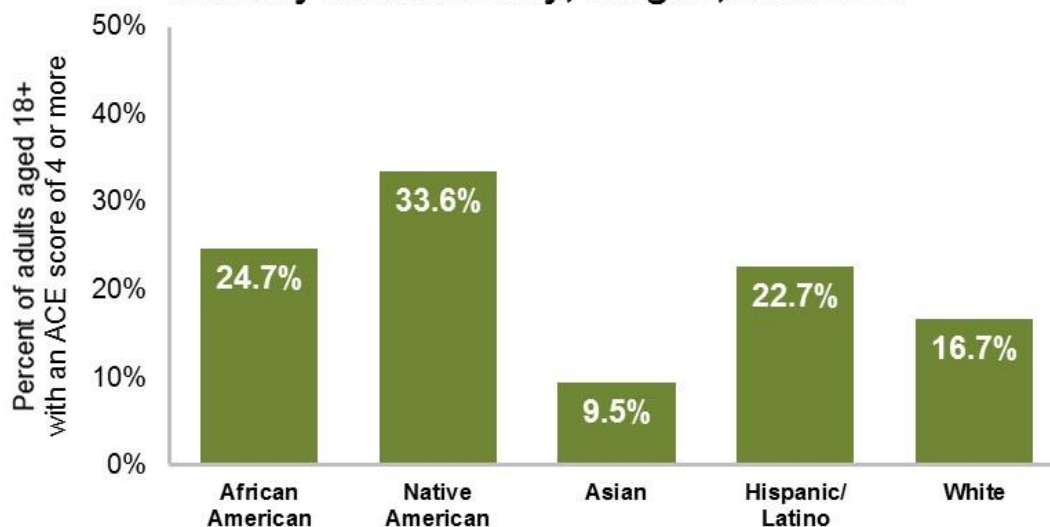
Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

³ Oregon Behavioral Risk Factor Surveillance System

In 2013-2016, the percentage of Oregon adults aged 18 to 44 who experienced four or more ACEs was higher for non-Hispanic Native Americans (33.6%), non-Hispanic African Americans (24.7%), and Hispanic/Latinos (22.7%), and lower for non-Hispanic Asians (9.5%) compared to non-Hispanic Whites (16.7%; Figure 3). Note: ACE scores reflect only those adverse experiences included in the BRFSS survey.

FIGURE 3

High ACE score (4+) among adults aged 18 or older by race/ethnicity, Oregon, 2013-2016



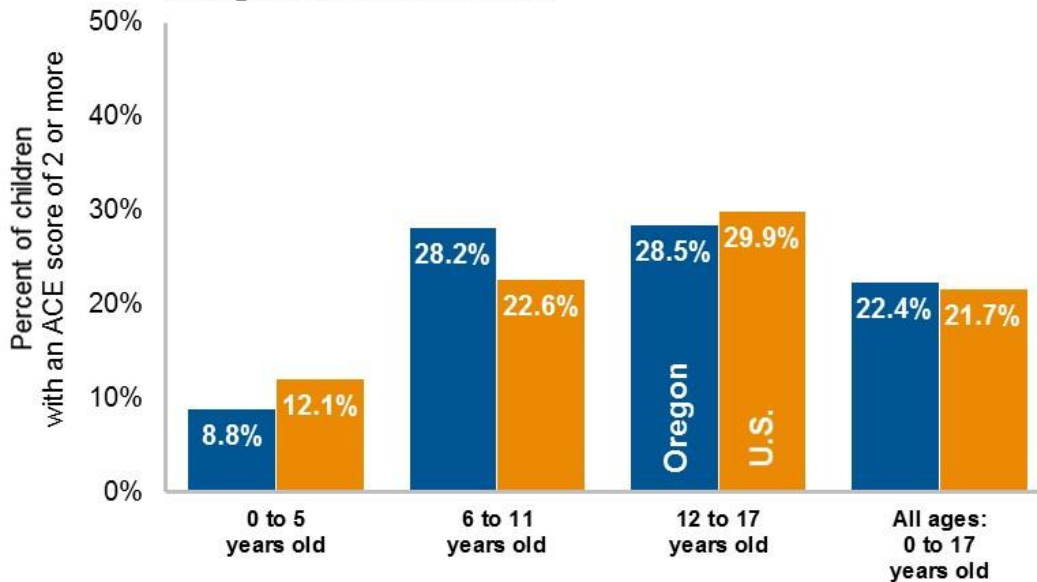
Note: All other groups exclude Hispanic ethnicity

Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

The National Survey of Children’s Health (NSCH) asks parents to report on their children’s exposure to a set of [nine adverse childhood experiences](#). Among Oregon children 0-17 years old, 22.4% have experienced 2 or more ACEs, which is similar to the percentage among all children in the US (21.7%; Figure 4). The percentage of children with high ACEs increases with age; the biggest increase is between 0-5 year-olds (8.8%) and 6 to 11 year olds (28.2%). Among the oldest children (12 to 17 year olds) nearly one in three (29.9%) have experienced 2 or more ACEs.

FIGURE 4

High ACE score (2+) among children by age, Oregon and U.S., 2016



Source: National Survey of Children's Health (NSCH)

Additional Resources: Centers for Disease Control and Prevention- www.cdc.gov/ace
Data Resource Center for Child and Adolescent Health - <http://childhealthdata.org/>
Harvard Center on the Developing Child - <https://developingchild.harvard.edu/>

About the Data: The first data source is the Behavioral Risk Factor Surveillance System (BRFSS). Data includes self-report of 11 ACEs (grouped into 8 types) among adults 18 years or older. The second data source is the National Survey of Children's Health (NSCH). Data includes parental report of nine types of ACEs experience by their children aged 0 to 17 years.

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