

# Adverse Childhood Experiences – Texas, 2002

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## Introduction

- In the mid-1980's, Kaiser Permanente conducted a weight loss program which had a high dropout rate. To understand why, Kaiser Permanente conducted detailed life interviews of 286 individuals.<sup>1</sup>
- Researchers discovered that sexual abuse was common among dropouts and that abuse predated obesity.
- As a follow-up, Kaiser Permanente, the Centers for Disease Control and Prevention, and Emory University conducted an Adverse Childhood Experiences (ACEs) study. The ACEs study included about 17,000 participants.<sup>1-2</sup>
- Results showed that childhood abuse and household dysfunction led to health risk behaviors (e.g., smoking, severe obesity, and physical inactivity) and chronic diseases (e.g., diabetes) later in life, starting in adolescence and extending into adulthood.<sup>3</sup>
- Traditionally behaviors are viewed as public health problems, but they may also be coping mechanisms.

## Objectives

- To examine the demographic characteristics of those Texas adults who experienced abuse, household dysfunction, or both during childhood.
- To describe the adult health behaviors, health indicators, and chronic conditions that are associated with ACEs.

## Methods

- The Texas Behavioral Risk Factor Surveillance System (BRFSS) is a statewide telephone survey of the non-institutionalized, civilian population who lived in a household with a residential phone line.
- Seventeen questions on ACEs were added to the 2002 Texas BRFSS Survey.
- Data were managed in SPSS (v. 13.0) and analyzed in SUDAAN 9.0.1.
- Estimates were weighted to adjust for the probabilities of selection and a post-stratification weighting factor that adjusted for the distribution of Texas adults by age and sex at the state level.
- All reported estimates are age-adjusted.

## Prevalence

**Table 1: Prevalence of Any Adverse Childhood Experiences (Age-Adjusted) 2002 Texas BRFSS**

|                         | %           | 95% Confidence Interval |
|-------------------------|-------------|-------------------------|
| <b>Total</b>            | <b>46.4</b> | <b>(44.8 - 47.9)</b>    |
| <b>Race / Ethnicity</b> |             |                         |
| White                   | 47.6        | (45.6 - 49.5)           |
| Black                   | 45.7        | (40.3 - 51.2)           |
| Hispanic                | 45.5        | (41.9 - 49.0)           |
| Other                   | 41.6        | (33.8 - 49.9)           |
| <b>Gender</b>           |             |                         |
| Male                    | 45.5        | (43.1 - 48.0)           |
| Female                  | 47.2        | (45.3 - 49.2)           |
| <b>Education Level</b>  |             |                         |
| < HS grad               | 49.5        | (45.4 - 53.5)           |
| HS grad                 | 48.3        | (45.4 - 51.3)           |
| Some college            | 49.2        | (46.2 - 52.2)           |
| College grad+           | 40.0        | (37.1 - 42.9)           |
| <b>Income Level</b>     |             |                         |
| < \$25,000              | 49.9        | (46.9 - 52.9)           |
| \$25,000 - \$49,999     | 50.0        | (47.1 - 52.8)           |
| \$50,000 +              | 42.9        | (39.9 - 45.9)           |
| <b>Employment</b>       |             |                         |
| Employed                | 44.7        | (42.1 - 47.4)           |
| Self-employed           | 49.1        | (43.2 - 55.1)           |
| Out of work             | 52.4        | (44.7 - 60.0)           |
| Homemaker               | 40.1        | (35.7 - 44.7)           |
| Student                 | 58.9        | (52.9 - 64.7)           |
| Retired                 | 41.4        | (23.6 - 61.7)           |
| Unable to work          | 61.7        | (51.4 - 71.1)           |

Table 1: Nearly half (46.4%) of all adult Texans had at least one ACE. Those who had a college degree (40.0%) were less likely to have any ACEs than other education level. The proportion of any ACEs was smallest among those who had household income levels of \$50,000 (42.9%).

Those who were unable to work (61.7%) were more likely to have at least one adverse childhood experience compared to those employed for wages (44.7%) and homemakers (40.1%).

## Results

**Figure 1: Prevalence of Childhood Abuse by ACEs Category (Age-Adjusted) 2002 Texas BRFSS**

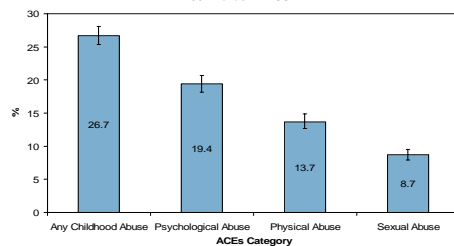


Figure 1: An estimated 26.7% of the Texas adult population reported having childhood abuse. Nearly one out of every five adults reported psychological abuse, one in seven reported physical abuse, and one in twelve reported sexual abuse.

**Figure 2: Prevalence of Household Dysfunction by ACEs Category (Age-Adjusted) 2002 Texas BRFSS**

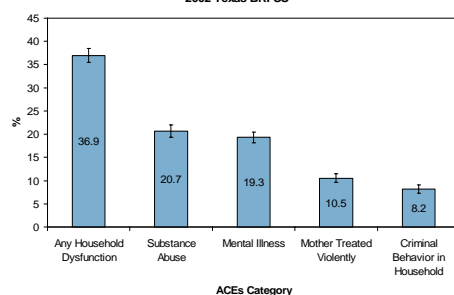


Figure 2: An estimated 36.9% of adults reported having any household dysfunction. Nearly one out of every five reported substance abuse or mental illness and one in every five had their mother treated violently.

**Figure 3: Prevalence of Household Dysfunction and Childhood Abuse (Age-Adjusted) 2002 Texas BRFSS**

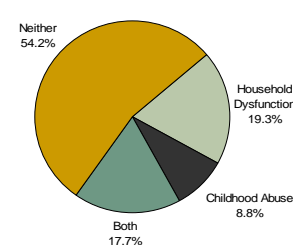


Figure 3: An estimated 17.7% experienced both abuse and household dysfunction in their youth, while 8.8% of adults only experienced abuse, and 19.3% only experienced household dysfunction.

Among those who lived in a dysfunctional household as a child, 47.1% (44.5-49.8) were also abused.

**Figure 4: Prevalence of Fair or Poor General Health by ACEs Category (Age-Adjusted) 2002 Texas BRFSS**

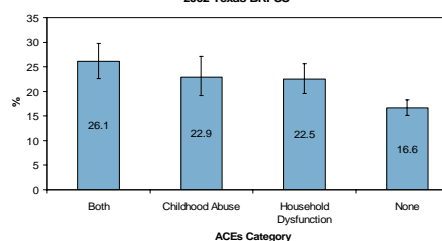


Figure 4: Those who grew up in dysfunctional household (22.5%), were abused as child (22.9%), or had at least one experience in both categories of ACEs (26.1%) were more likely than those who had no ACEs (16.6%) to have fair or poor general health status.

**Figure 5: Prevalence of Current Smokers by ACEs Category (Age-Adjusted) 2002 Texas BRFSS**

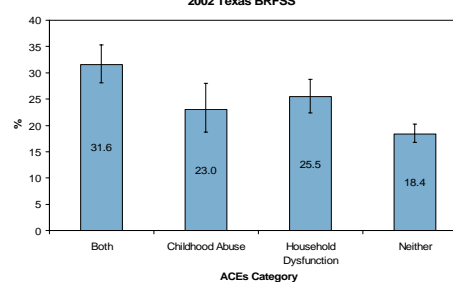


Figure 5: One-third (31.6%) of those adults who experienced both childhood abuse and household dysfunction currently smoke cigarettes compared to 23.0% of those who experienced child abuse, 25.5% of those who experienced childhood household dysfunction, and 18.4% of those who did not have any ACEs.

**Figure 6: Prevalence of Obesity by ACEs Category (Age-Adjusted) 2002 Texas BRFSS**

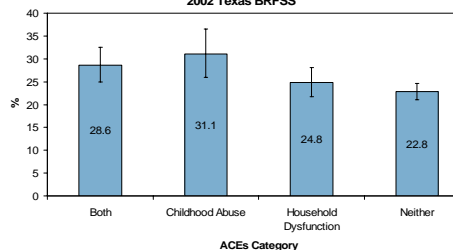


Figure 6: Those who experienced both childhood abuse and household dysfunction (28.6%) and those who were abused as a child (31.1%) were more likely to be obese than those who did not have these experiences (22.8%).

## Definitions

- Psychological Abuse (Category 1):** Answered "Yes" to either question:
  - "Did a parent or other adult in your household often or very often...
    - ...swear at, insult, or put you down?"
    - ...act in a way that made you afraid that you would be physically hurt?"
- Physical Abuse (Category 2):** Answered "Yes" to either question: "Did a parent or other adult in your household often or very often...
  - ...push, grab, shove, or slap you?"
  - ...hit you so hard that you had marks or were injured?"
- Sexual Abuse (Category 3):** Answered "Yes" to any of the following questions: "Did an adult or person at least five years older ever...
  - ...touch or fondle you in a sexual way?"
  - ...have you touch their body in a sexual way?"
  - ...attempt oral, anal, or vaginal intercourse with you?"
  - ...actually have oral, anal, or vaginal intercourse with you?"
- Substance Abuse (Category 4):** Answered "Yes" to either question: "During your childhood, did you live with anyone who...
  - ...was a problem drinker or alcoholic?"
  - ...used street drugs?"
- Mental Illness (Category 5):** Answered "Yes" to either question:
  - "Was a member of your household ever depressed or mentally ill?"
  - "Did a member of your household ever attempt suicide?"
- Mother Treated Violently (Category 6):** Answered "Yes" to any of the following questions: "Was your mother (or stepmother)...
  - ...sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at her?"
  - ...sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?"
  - ...ever repeatedly hit over at least a few minutes?"
  - ...ever threatened with, or hurt by, a knife or a gun?"
- Criminal Behavior in Household (Category 7):** Answered "Yes" to: "Did a member of your household ever go to prison?"
- Childhood Abuse (Categories 1-3):** The proportion of Texas adults who reported any psychological, physical, or sexual abuse.
- Household Dysfunction (Categories 4-7):** The proportion who reported that, as a child, they witnessed domestic violence or had lived with family members who had substance abuse problems, had a mental illness, had attempted suicide, or were incarcerated.

## Discussion

- The data from the 2002 Texas BRFSS provides further evidence of the association between the joint contribution of childhood abuse and household dysfunction and their cumulative impact on public health problems, such as current health related quality of life, smoking rates, and obesity.
- The findings strongly suggest a need for increased awareness, through the development of new programs that include educational materials and campaigns with information about the importance of preventing these types of adverse childhood experiences.
- In addition, programs and interventions must also include approaches designed to help individuals develop better positive coping strategies that address the all too common stressors of abuse, domestic violence, and related adverse experiences in childhood.

## References

- Redding, CA and VJ Felitti. Origins and Essence of the Study. April 2003. ACE Reporter 1(1): 1-4. [www.acesstudy.org/docs/newsletters/ARV1N1.pdf](http://www.acesstudy.org/docs/newsletters/ARV1N1.pdf). (Access date: March 19, 2007.)
- Centers for Disease Control and Prevention. 1998. Adult health problems linked to traumatic childhood experiences. Press Release. [www.cdc.gov/od/oc/media/pressrel/r980514.htm](http://www.cdc.gov/od/oc/media/pressrel/r980514.htm). (Access date: March 19, 2007.)
- Felitti, VJ, RF Anda, D Nordenberg, et al. 1998. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. Am J Prev Med 14(4): 245-258.