

Adverse Childhood Experiences among Adult Floridians  
*Findings from the 2010 Behavioral Risk Factor Surveillance System*





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## EXECUTIVE SUMMARY

*Early life adversity such as poverty, child maltreatment, exposure to violence and substance abuse, and parental mental illness has long been known as a potential detriment to children's cognitive, social and emotional development.*

More recently, researchers have identified a link between cumulative early adversity and changes to the developing body and brain. These changes are believed to be the result of "toxic stress" – the most dangerous form of stress in children – and are expected to significantly increase an individual's susceptibility to illness and disease.<sup>1</sup>

The striking association between early life adversity and later adult health has moved cumulative early life adversity (often termed adverse childhood experiences; ACEs) to the forefront of priorities for researchers, clinicians, and policy makers.<sup>2,3</sup> As part of the ACE movement, several states have begun collecting population-level ACE data through the Behavioral Risk Factor Surveillance System (BRFSS) – a telephone survey that collects state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.<sup>4</sup>

The current report presents a portion of Florida's BRFSS ACE data and associations between ACEs and health. We examined the prevalence of ACEs among Floridians as well as the association

between ACEs and health conditions and risks for health conditions, and risk behaviors (e.g., smoking).

We found that 50% of adults in Florida experienced at least one ACE during their childhood. Furthermore, approximately 13% experienced three or more ACEs. Individuals who identified as multi-racial or "other" race, individuals with less than a high school diploma, and individuals with a current household income of less than \$25,000 were the most likely to have three or more ACEs.

The number of ACEs experienced was directly related to likelihood of poor health. Compared to adults with zero ACEs, adults with at least one ACE were more likely to have self-reported poor health, be physically and mentally unhealthy on 14 or more of the past 30 days, and be dissatisfied with life.

Additionally, adults with at least one ACE were more likely to be a current or former smoker, engage in binge drinking during the last 30 days, and have an HIV risk factor in the past year (e.g., risky sexual behaviors, shared needles). Finally, adults with at least three ACEs were more likely to have a number of specific health conditions including diabetes or pre-diabetes, arthritis, and a heart attack.

These findings are similar to those of other states and the national studies. Recommendations for policy and practice include continued examination of ACEs, promotion of safe, stable, nurturing relationships, development of trauma informed communities, and collaboration among ACE researchers.

*The number of ACEs experienced was directly related to likelihood of poor health*



## CONTENTS

**01**  
EXECUTIVE SUMMARY

---

**04**  
BACKGROUND

---

**08**  
METHODS

---

**12**  
FINDINGS

---

**30**  
RECOMMENDATIONS

---

**31**  
ACRONYMS

# BACKGROUND



Adverse childhood experiences or “ACEs” are broadly defined as events that negatively alter the developing brain and body.

## WHAT ARE ADVERSE CHILDHOOD EXPERIENCES?

Adverse childhood experiences or “ACEs” are broadly defined as events that negatively alter the developing brain and body. These alterations may result in changes to cognitive, social/emotional, or physical functioning and may have lifelong effects on health. Frequently studied ACEs include but are not limited to child maltreatment (abuse and neglect) and household dysfunction (parental divorce, caregiver violence and incarceration, caregiver mental illness).

### Example adverse childhood experiences:

- Child maltreatment (physical, sexual, emotional abuse; physical and emotional neglect)
- Household member with mental illness
- Household member with substance abuse problem
- Household member who was incarcerated
- Death of a parent
- Divorce of a parent
- Violence between adults in the home

Endorsement of each item above results in “1 ACE point.” An ACE score is then derived from a sum of each ACE point for a potential range of 0-8. As each ACE study uses somewhat different ACE items, total scores can vary.

In a seminal study conducted by Anda and colleagues<sup>4</sup>, in collaboration with Kaiser Permanente, researchers found approximately 52% of adults reported having experienced at least one adverse event in their childhood. These researchers compared these experiences to health conditions and found strong associations between having ACEs and likelihood of having serious physical and mental health conditions. Specifically, ACEs were associated with unhealthy behaviors (e.g., smoking, early

initiation sexual activity, unintended pregnancies), mental health disorders (e.g., depression, addiction disorder), a number of chronic health conditions (e.g., cardiac, neuroendocrine, metabolic disorders), and high prescription drug use. Additionally, the Centers for Disease Control and Prevention estimates the lifetime costs associated with child maltreatment to be \$124 billion and include productivity loss, health care, special education, child welfare, and criminal justice.<sup>5</sup>

# How do ACEs lead to poor health?

The path from ACEs to poor health is multifaceted. Investigators from the seminal ACE study put forth a pyramid model (Figure 1) displayed here which outlines the cascade effect adversity has on development and behavior. It is important to acknowledge, however, that this linear model is simplistic. To understand ACEs, researchers, clinicians, and policymakers should consider that development is a product of complex bi-directional interactions between genetics and environment.

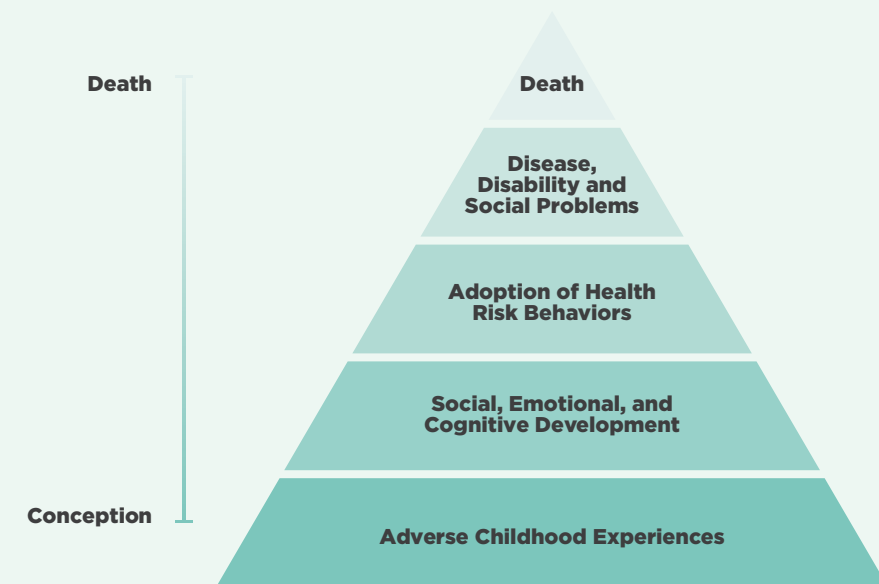


Fig 1

## RESILIENCY AND PROTECTIVE FACTORS

The presence of safe, stable, and nurturing relationships (SSNRs) can prevent or mitigate the negative impact of adversity on health.<sup>6</sup> Arguably the most important SSNR is that of parent and child. When the parent-child relationship is compromised, however, SSNRs can also be formed with grandparents, mentors, teachers, and other relatives.

Additionally, it is important to understand that not all children who experience adversity will have poor health outcomes. In their examination of individual differences in sensitivity to the environment, researchers describe that some children can be greatly affected by their environment while others are not affected at all.<sup>7</sup> Children who are greatly susceptible to their environment, or “orchid” children, may be the most likely to be affected by adversity and in turn experience poor developmental and health. These children are also most likely to flourish in a nurturing environment. Children who are less susceptible to their environment, or “dandelion” children, are no more likely to develop poor health when in an adverse or nurturing environment. Factors contributing to sensitivity can be both environmental and genetic.

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## CURRENT REPORT

In recent years, the Centers for Disease Control and Prevention (CDC), in collaboration with one of the original ACE study co-investigators, developed an ACE module for use in the Behavioral Risk Factor Surveillance System (BRFSS). This optional module allows states to examine ACEs among their own residents, which can then be translated to recommendations for state policies and practice (e.g., mental health services).

In 2008, 2010, and 2014, the ACE module has been included in the Florida BRFSS. In 2010, the Florida BRFSS was stratified across all 67 counties to meet the needs of County Health Departments (CHD) and increase the county-level sample size. This stratification provides a unique county-level dataset of ACEs for the state of Florida. Through collaboration between the Florida Department of Health (DOH) and the Institute for Child Health Policy at the University of Florida, the current report presents the results of the 2010 Florida BRFSS ACE module.

# METHODS



Five ACEs items were included in the 2010 Florida BRFSS ACE module. These items included:

- 1 Did your parents' divorce or did you have a parent die during your childhood?
- 2 Did you live with anyone who was a problem drinker, alcoholic, or who used illicit drugs?
- 3 Was anyone in your childhood home mentally depressed, mentally ill or tried to attempt suicide?
- 4 Did parents or adults in your home ever push, grab, shove, slap, or throw something at each other?
- 5 Were you abused by an adult family member during your childhood?

The Behavioral Risk Factor Surveillance System (BRFSS) is a national telephone survey conducted annually by the Center for Disease Control and Prevention (CDC) in all 50 states, the District of Columbia, and U.S. territories. The survey measures health risks behaviors, prevalence of chronic conditions, injury, use of preventive health practices, and health care access.

To conduct the BRFSS, Florida uses disproportionate stratified sampling (DSS). Phone numbers are drawn from two sets of telephone number blocks. One adult, 18 years and older, is selected per telephone number to complete the survey. Sample weighting procedures were used

to adjust for the chance of an adult being selected to complete the survey and for discrepancies between the adults who completed the survey and the overall population of Florida adults. Data were weighted to the respondent's probability of selection by county as well as age and sex based on 2010 population estimates. Forty-four records were further adjusted during the weighting process.

A total of 35,108 Florida adults completed the 2010 BRFSS survey, with a response rate of 45.5%. Of these 35,108 adults, 29,292 (83.3%) completed and were included in the ACE analyses presented in this report.

The child abuse item was created by combining two questions: "Were you abused by someone during your childhood?" and "Was this person an adult family member, a family member under the age of 18, or someone else?" To capture abuse by a parent or caregiver, only individuals who reported abuse by an adult family member was included as abuse.

From these responses, an ACE score of 0-5 was calculated by summing the number of affirmative responses to each ACE question. For predictive analyses, scores were collapsed into three categories: 0, 1, 2, or  $\geq 3$  ACEs. ACE scores were then compared to self-report of the following health status indicators: physical health, mental health, life satisfaction, health risk

behaviors and chronic conditions.

Analyses were conducted using SAS 9.3 statistical software. Comparisons were made using logistic regressions with number of ACEs predicting likelihood of each outcome adjusting for age, race, sex, education level, and household income. Only statistically significant results ( $p < .05$ ) are presented in this report.

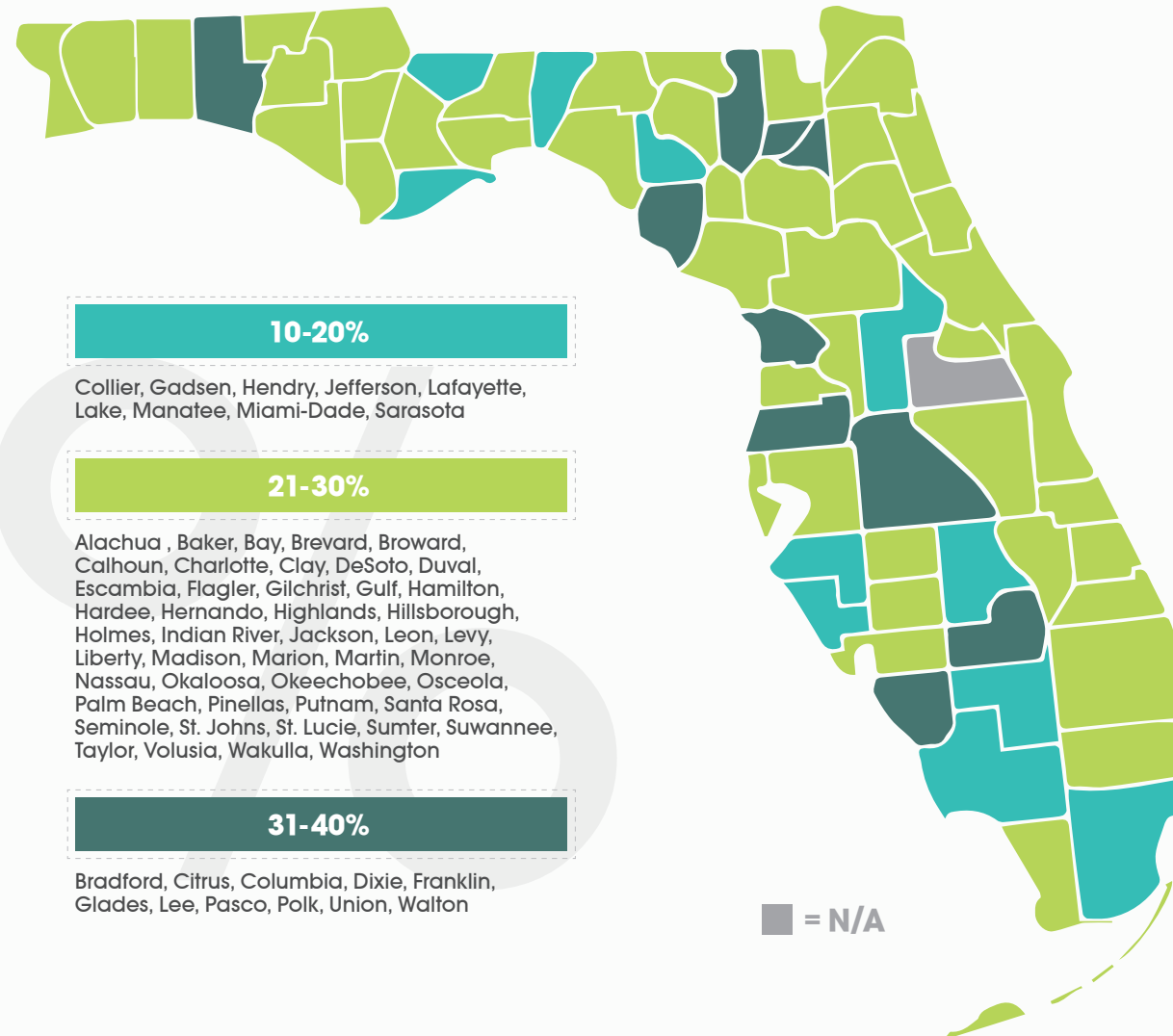
Because BRFSS respondents are randomly selected, measures of prevalence and mean are subject to random sample errors. Each measure listed in the data tables includes the 95% confidence interval (CI). Measures of prevalence and mean are excluded from the tables for any subpopulation with a sample size less than 30, which would yield statistically unreliable estimates.



# FINDINGS



**% OF COUNTY RESIDENTS WHO REPORT 2 OR MORE ACES**



**DEMOGRAPHICS**

DEMOGRAPHIC CHARACTERISTIC	PERCENTAGE
<b>AGE</b>	
18-44 years	35.0%
45-64 years	41.0%
65 years and older	24.0%
<b>RACE / ETHNICITY</b>	
White, Non-Hispanic	72.3%
Black, Non-Hispanic	9.8%
Hispanic	13.6%
Other/Multiracial	4.4%
<b>SEX</b>	
Male	47.7%
Female	52.3%
<b>EDUCATION</b>	
Less than High School	6.6%
High School/GED	26.4%
Greater than High School	66.9%
<b>INCOME</b>	
Less than \$25,000	26.0%
\$25,000-\$49,999	25.5%
\$50,000 or more	48.5%

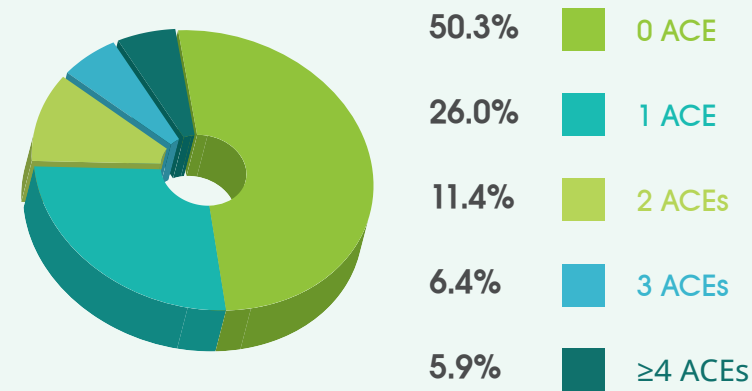






# OVERALL PREVALENCE

## PERCENT OF RESPONDENTS WITH EACH ACE SCORE



Approximately 50% of adult Floridians report having experienced at least one ACE in their lifetime. This percentage is slightly lower than other states that have reported ACE BRFSS data.

## PERCENT OF RESPONDENTS WITH EACH ACE

ACE question	Number of respondents who said yes	% of respondents who said yes
Parental divorce or parental death	8543	30.9
Household member substance abuse problem	6601	22.4
Household member mental illness	3497	13.2
Exposure to domestic violence	5287	18.8
Abuse as child by an adult family member	2764	9.0

Parental divorce is the most prevalent ACE among adult Floridians, abuse by an adult family member is the least prevalent ACE among adult Floridians. This pattern is consistent with other ACE studies of adults and children.

## PREVALENCE BY AGE

AGE	0 ACE	1 ACE	2 ACES	3+ ACES
18-44 years	43.5%	27.1%	13.0%	16.4%
45-64 years	49.1%	25.2%	11.5%	14.2%
65 years +	61.2%	25.4%	8.7%	4.6%

There was increasing prevalence of 0 ACEs among older age groups, with each age group being statistically different from the others. There were a lower percentage of 2 or 3 ACEs among adults 65 years old and older compared to adults 18-64 years.

## PREVALENCE BY RACE

RACE	0 ACE	1 ACE	2 ACES	3+ ACES
White, Non-Hispanic	49.9%	25.2%	12.0%	13.0%
Black, Non-Hispanic	50.1%	32.0%	9.1%	8.8%
Hispanic	49.1%	26.2%	10.9%	13.8%
Other/Multiracial	53.1%	23.0%	8.3%	15.2%

Non-Hispanic Blacks had a high percentage of 1 ACE and a lower percentage of 3 ACEs than did Non-Hispanic Whites or Hispanics.

## PREVALENCE BY EDUCATION

EDUCATION	0 ACE	1 ACE	2 ACES	3+ ACES
Less than High School	38.4%	28.1%	15.1%	18.4%
High School/GED	44.6%	29.6%	11.0%	14.8%
Greater than High School	53.3%	24.3%	11.2%	11.2%

Adults with a greater than high school education had a higher percentage of 0 ACEs and a lower percentage of 3 ACEs than did adults with less than a high school education. Adults with greater than a high school education also had a lower percentage of 1 ACE than did adults with a high school education or less.

## PREVALENCE BY INCOME

INCOME	0 ACE	1 ACE	2 ACES	3+ ACES
Less than \$25,000	42.1%	28.4%	15.1%	18.4%
\$25,000-\$49,999	48.7%	27.8%	12.0%	11.5%
\$50,000 or more	53.9%	23.7%	10.9%	11.4%

Adults with an income of less than \$25,000 had a higher percentage of 1 ACE than individuals with an income of \$50,000 or more. Adults with an income of less than \$25,000 had a higher percentage of 3 ACEs than did individuals with an income of \$25,000 or more.

There were no significant differences between males and females in any ACE category.

## OVERALL HEALTH

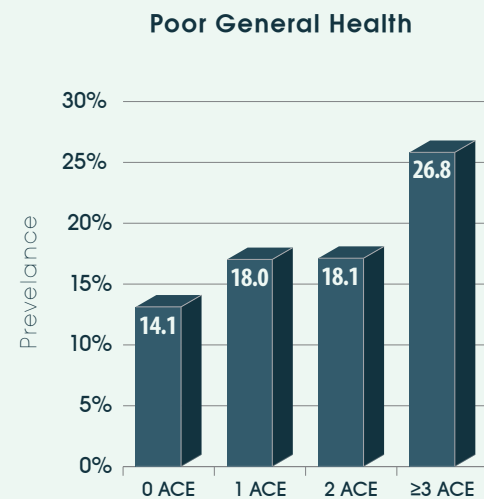


From the seminal study of ACEs and health in a large sample of adult HMO enrollees, as well as subsequent statewide ACE studies, researchers found retrospective reports of at least one ACE to be associated with an increased likelihood of a number of health concerns including overweight and obese weight status<sup>3</sup> and chronic conditions including headaches, liver disease, ischemic heart disease, chronic obstructive pulmonary disease and autoimmune disease<sup>5,6,7,8</sup>.

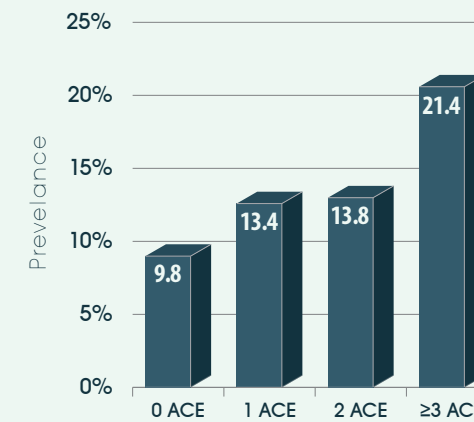
### GENERAL HEALTH IS FAIR OR POOR

“Would you say that in general your health is ...”

Responses of ‘excellent, very good, and good’ were combined and responses of “fair” and “poor” were combined. Compared with adults who experienced 0 ACEs, adults who experienced 1, 2, or ≥3 ACEs were 1.4, 1.5, and 2.5 times more likely to have overall fair or poor general health, respectively.



### Physical Health



### PHYSICALLY UNHEALTHY FOR AT LEAST 14 OF 30 DAYS

“Now thinking about your physical health, which includes physical illness or injury, for how many days during the past 30 days was your physical health not good?”

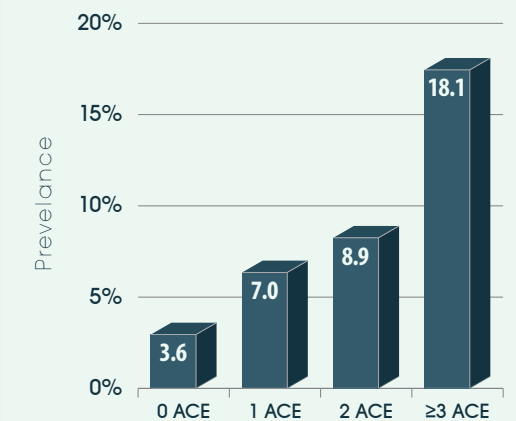
Responses were dichotomized to physically unhealthy on at least 14 or more of the past 30 days or physically unhealthy on less than 14 of the past 30 days. Compared to adults who experienced 0 ACE, adults who experienced 1, 2, or ≥3 ACE were 1.4, 1.5, and 2.7 times more likely to have been physically unhealthy on 14 or more of the past 30 days, respectively.

### DISSATISFIED WITH LIFE

“In general, how satisfied are you with your life?”

Responses of satisfied and very satisfied were combined and responses of very dissatisfied and dissatisfied were combined. Compared to adults who experienced 0 ACEs, adults who experienced 1, 2, or ≥3 ACE were 1.6, 2.3, and 4.5 times more likely to be very dissatisfied or dissatisfied with their life, respectively.

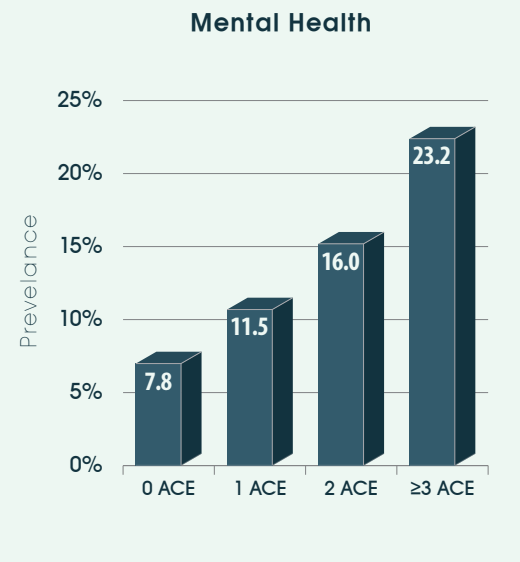
### Life Satisfaction



**MENTALLY UNHEALTHY FOR AT LEAST 14 OF THE PAST 30 DAYS**

“Now thinking about your mental health, which includes stress, depression and problems with emotions, for how many days during the past 30 days was your mental health not good?”

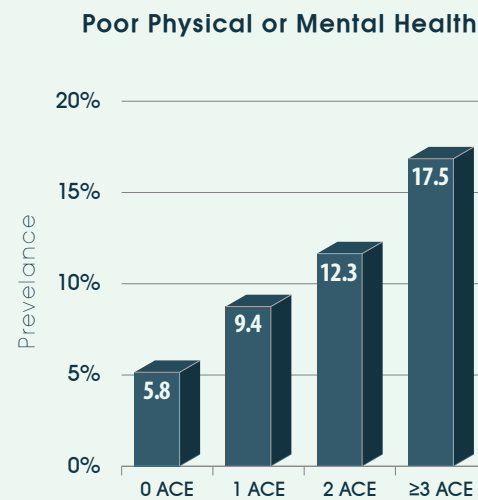
Responses were dichotomized to mentally unhealthy on at least 14 or more of the past 30 days or mentally unhealthy on less than 14 of the past 30 days. Compared to adults who experienced 0 ACEs, adults who experienced 1, 2, or ≥3 ACEs were 1.3, 1.8, and 2.7 times more likely to have been mentally unhealthy on 14 or more of the past 30 days, respectively.



**PHYSICALLY OR MENTALLY UNHEALTHY FOR AT LEAST 14 OF THE PAST 30 DAYS**

“During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?”

Responses were dichotomized to physically/mentally unhealthy on at least 14 or more of the past 30 days or physically/mentally unhealthy on less than 14 of the past 30 days. Compared to adults who experienced 0 ACEs, adults who experienced 1, 2, or ≥3 ACEs were 1.7, 2.4, and 3.4 times more likely to have been kept from doing usual activities on 14 or more of the past 30 days due to poor physical or mental health, respectively.





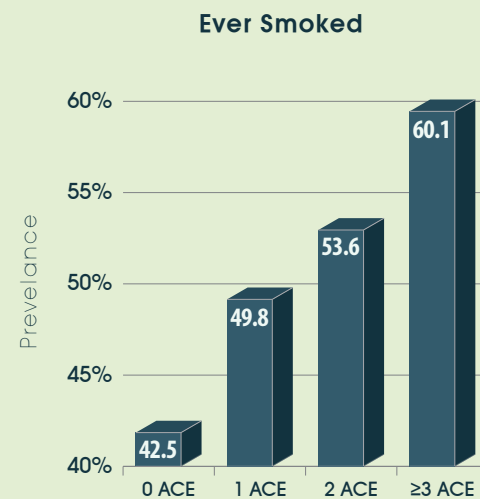
## RISK BEHAVIORS

ACEs have been found to lead not only to poor health, but also precipitants of poor health such as smoking and excessive drinking.

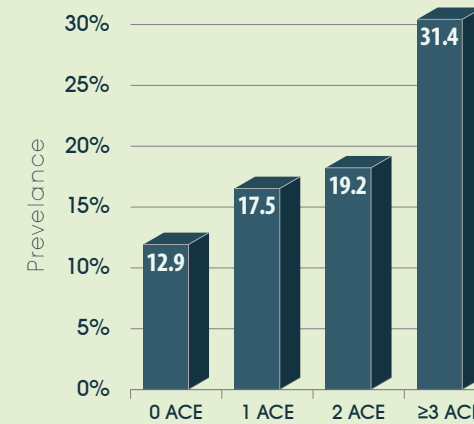
### EVER SMOKED

“Have you smoked at least 100 cigarettes in your entire life?”

Compared to adults who experienced 0 ACEs, adults who experienced 1, 2, or ≥3 ACEs were 1.4, 1.6, and 2.3 times more likely to have ever smoked, respectively.



### Currently Smoking



### CURRENTLY SMOKING

“Do you now smoke cigarettes every day, some days, or not at all?”

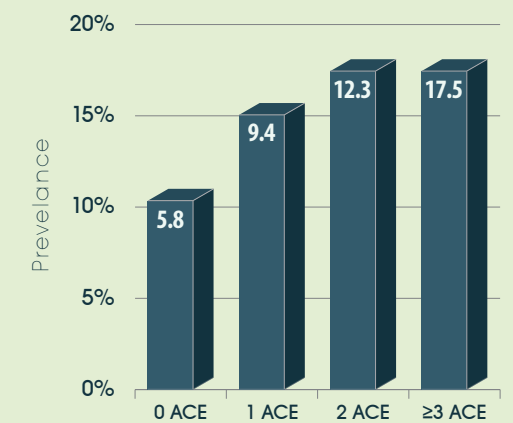
Compared to adults who experienced 0 ACEs, adults who experienced ≥3 ACEs were 2.3 times more likely to be a current smoker. There were no differences in likelihood of currently smoking among adults who experienced 1 or 2 ACEs.

### ENGAGED IN BINGE DRINKING

“Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 for men and 4 for women, or more drinks on an occasion?”

Compared to adults who experienced 0 ACEs, adults who experienced 1, 2, or ≥3 ACEs were 1.5, 1.6, and 1.5 times more likely to have engaged in binge drinking in the past 30 days, respectively. Experienced 1 or 2 ACEs.

### Binge Drinking



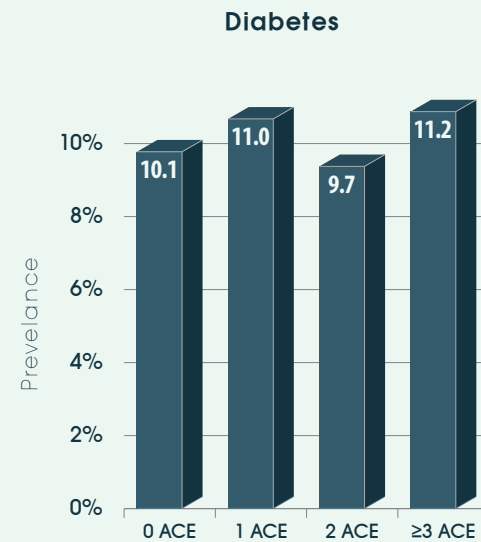


## CONDITIONS AND RISK FOR CONDITIONS

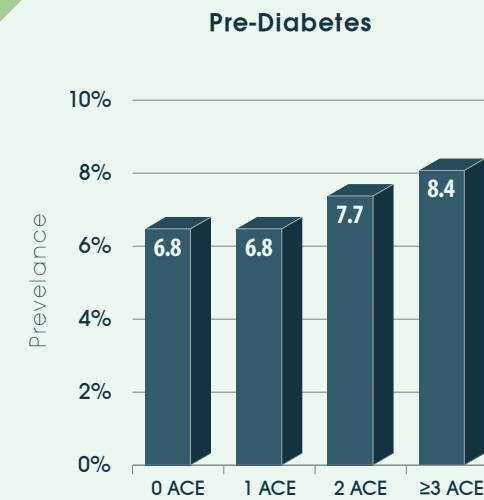
### DIABETES

“Have you ever been told by a doctor that you have diabetes?” Note: This item excludes women who were told they have diabetes while pregnant.

Compared to adults who experienced 0 ACEs, adults who experienced  $\geq 3$  ACEs were 1.7 times more likely to have been told they have Diabetes. There were no differences in likelihood of having diabetes among adults who experienced 1 or 2 ACEs.



### PRE-DIABETES



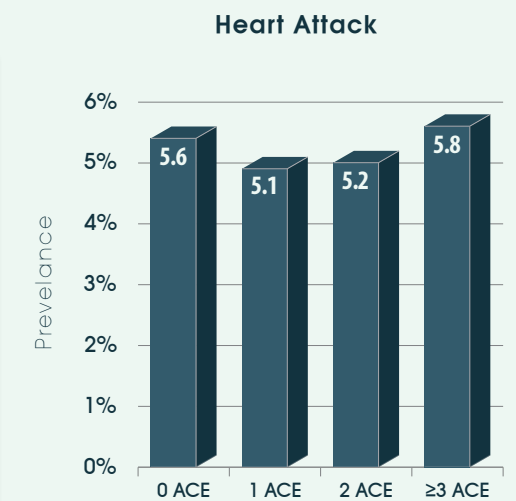
“Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes?”  
Note. This item excludes women who had diabetes only while pregnant.

Compared to adults who experienced 0 ACE, adults who experienced  $\geq 3$  ACEs were 1.6 times more likely to have pre-diabetes. There were no differences in likelihood of having pre-diabetes among adults who experienced 1 or 2 ACEs.

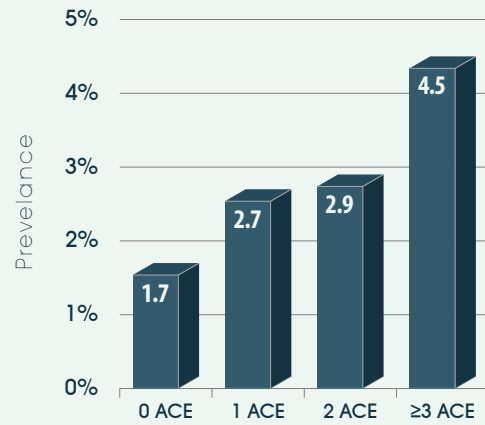
### HEART ATTACK

“Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?”

Compared to adults who experienced 0 ACEs, adults who experienced  $\geq 3$  ACEs were 1.8 times more likely to have had a heart attack. There were no differences in likelihood of having a heart attack among adults who experienced 1 or 2 ACEs.



**HIV Risk Behaviors**

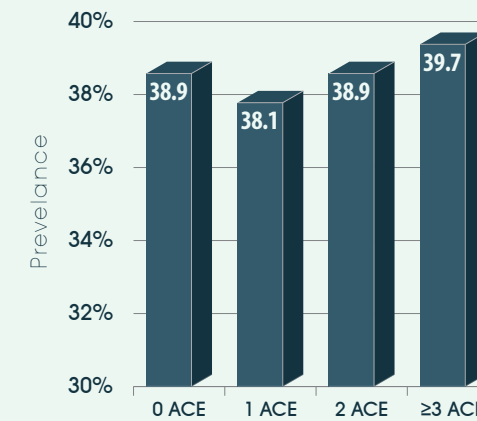


**HIV RISK BEHAVIORS**

“I’m going to read a list. When I am done, please tell me if any of the situations apply to you. You do not need to tell me which one. You have used intravenous drugs in the past year. You have been treated for a sexually transmitted or venereal disease in the past year. You have given or received money or drugs in exchange for sex in the past year. You had anal sex without a condom in the past year.”

Compared to adults who experienced 0 ACE, adults who experienced ≥3 ACEs were 2.5 times more likely to have engaged in HIV risk behaviors in the past year. There were no differences in likelihood of having an HIV risk behavior among adults who experienced 1 or 2 ACEs.

**High Cholesterol**



**HIGH CHOLESTEROL**

“Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?”

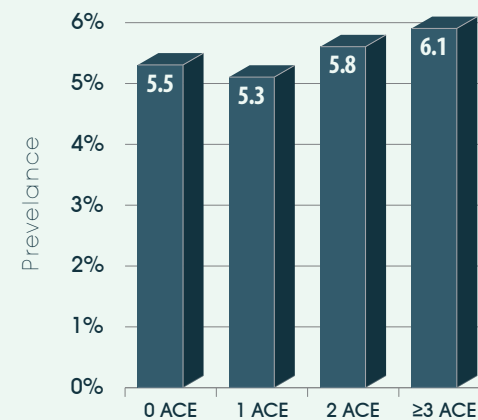
Compared to adults who experienced 0 ACE, adults who experienced 2 or ≥3 ACEs were 1.2 and 1.6 times more likely to have had high cholesterol, respectively. There were no differences in likelihood of having high cholesterol among adults who experienced 0 or 1 ACE.

**ANGINA OR CORONARY HEART DISEASE**

“Has a doctor, nurse or health professional ever told you that you had angina or coronary heart disease?”

Compared to adults who experienced 0 ACE, adults who experienced 2 or ≥3 ACEs were 1.4 and 2.0 times more likely to have had angina or coronary heart disease, respectively.

**Angina or Coronary Heart Disease**

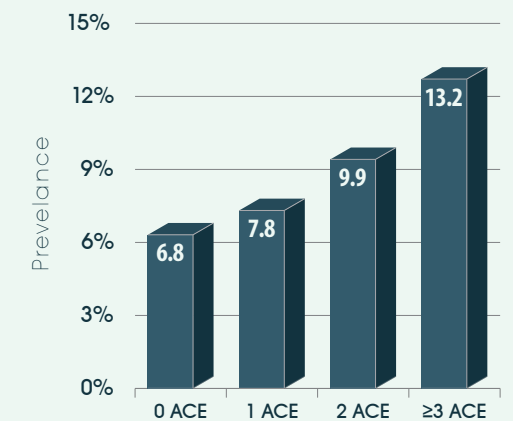


**ASTHMA**

“Have you ever been told by a doctor, nurse or health professional that you had asthma?”

Compared to adults who experienced 0 ACE, adults who experienced 2 or ≥3 ACEs were 1.4 and 2.0 times more likely to have asthma, respectively. There were no differences in likelihood of having asthma among adults who experienced 0 or 1 ACE.

**Asthma**

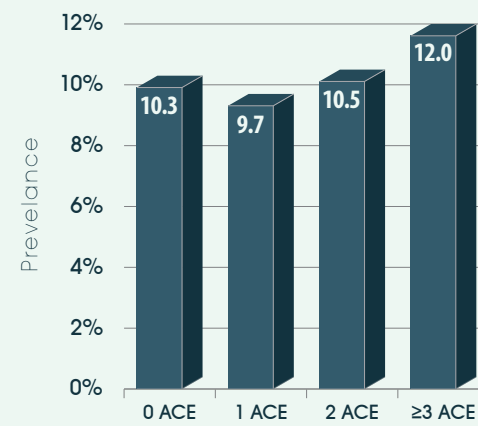


**HEART ATTACK, ANGINA, CORONARY HEART DISEASE, OR STROKE**

The following three questions were combined for this measure. “Has a doctor, nurse or health professional ever told you that you had a heart attack, also called a myocardial infarction?” “Has a doctor, nurse or health professional ever told you that you had angina or coronary heart disease?” “Has a doctor, nurse or health professional ever told you that you had a stroke?”

Compared to adults who experienced 0 ACE, adults who experienced  $\geq 3$  ACEs were 2.0 times more likely to have had a heart attack, angina, coronary heart disease or a stroke.

**Heart Attack, Angina, Coronary Heart Disease, or Stroke**

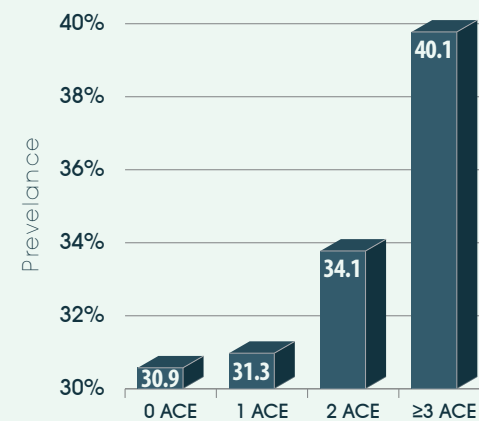


**ARTHRITIS**

“Have you ever been told by a doctor, nurse or health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?”

Compared to adults who experienced 0 ACEs, adults who experienced 2 or  $\geq 3$  ACEs were 1.5 and 2.5 times more likely to have arthritis, respectively. There were no differences in likelihood of having arthritis among adults who experienced 0 or 1 ACE.

**Arthritis**





## SUMMARY

*How does Florida compare to other states?*

State	Range	0 ACE	1 ACE	2 ACEs	3 ACEs	≥4 ACEs
Florida	0-5	50.3%	26.0%	11.4%	6.4%	5.9%
Arkansas	0-11	46.9 %	21.0%	11.2%	7.1%	13.9%
Louisiana	0-11	42.6 %	24.7%	12.9%	7.7%	12.1%
New Mexico	0-11	39.0 %	21.8%	12.6%	10.1%	16.6%
Tennessee	0-11	43.5 %	20.8%	12.6%	8.3%	14.9%
Washington	0-11	34.6 %	23.0%	14.6%	10.3%	17.6%
Wisconsin	0-8	44.0%	22.0%	12.0%	7.0%	14.0%
Iowa	0-8	45.0%	21.3%	11.8%	7.2%	14.7%

Compared to select states, Florida had the highest percentage of zero ACEs and the lowest percentages of 3 and 4 or more ACEs. It is important to note that in 2010, the Florida ACE module included only five ACEs whereas other states have included 8 or 11 ACE items. Thus, although many of the ACEs measured in the Florida module frequently co-occur with other ACEs, our analyses could be we could be underestimating the prevalence of ACEs.

Based on results from BRFSS ACE modules, some states have begun developing strategies for identification and management of ACEs. California, for example, has created advocacy groups that do outreach, raise awareness of ACEs, and lobby for legislation. Other states are in the beginning stages. Iowa, Washington, and Wisconsin, for example, have collected BRFSS ACE data and produced comprehensive technical reports, which include specific recommendations for statewide action. Still other states (i.e., Arizona, Illinois, Maine, and New York) have developed committees and councils for advocacy but have not yet started collecting ACE BRFSS data.







## RECOMMENDATIONS

*This report represents the first action using Florida's BRFSS ACE module. Based on findings from this analysis, as well as action taken by other states, we provide the following recommendations:*

- 1** There needs to be continued research and support for research on ACEs. Research should be focused on but not limited to a) understanding the prevalence of ACEs and identifying high-risk geographic areas, b) development and testing of physician screening tools, and c) analysis of community resources available to individuals with ACEs as well as feasibility of obtaining these resources. Relatedly, additional ACE items should be added to the Florida BRFSS so that better comparisons can be made to other states who measure additional ACEs.
- 2** Take an active role in the promotion of safe, stable, nurturing relationships (SSNRs) and environments. The Center for Disease Control and Prevention (CDC), Division of Violence Prevention, has developed a guidebook for communities to promote SSNRs and prevent child maltreatment (Essentials for Childhood). This framework has been implemented in five state health departments across the nation and should be considered for use in Florida.
- 3** Develop trauma-informed communities. Trauma-informed communities promote awareness about the impact of traumatic stress across child-serving systems, increase access to evidence-supported assessment and treatment services, educate providers and administrators to effect practice change, and maintain collaborations across multiple professional disciplines involved in the identification and service delivery of children and families affected by trauma.
- 4** Key to the realization of all recommendations above is dissemination of findings and collaboration. Specifically, there needs to be a gathering of individuals working on ACEs in Florida. Other states have held summits and included families, researchers, clinicians, and policy makers with great success. By meeting other individuals working on the same goal, initiatives can be developed from a strong, multidisciplinary perspective.

## ACRONYMS

<b>ACE</b>	Adverse Childhood Experiences
<b>BRFSS</b>	Behavioral Risk Factor Surveillance System
<b>CDC</b>	Centers for Disease Control and Prevention
<b>CHD</b>	County Health Department
<b>GED</b>	General Education Degree
<b>DOH</b>	Department of Health
<b>DSS</b>	Disproportionate Stratified Sampling
<b>SSNR</b>	Safe, Stable, Nurturing Relationships

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