

# **Adverse Childhood Events (ACEs) in Connecticut**

*Presented to*

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*By*

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# Background - ACEs

- **Adverse childhood events (ACEs)** are traumatic events within the household that are widely believed to increase susceptibility for poor outcomes in adulthood.

- **Types of ACEs:**

**Abuse:** verbal, physical, sexual;

**Household Dysfunction:** mental illness, incarceration, substance abuse, parental separation/divorce, and violence.



# Background – Adult Outcomes

## Studies suggest that ACEs are associated with adult health issues:

Premature death

Substance Abuse

Toxic stress

Sexual risk behaviors

Cancer

Depression

Diabetes

Cardiovascular Disease



# ACEs among adults in Connecticut, outline of presentation

## Among adults (18 years and older) in Connecticut:

- Prevalence of ACEs, by type of ACEs;
- Burden of ACEs, by number of ACEs;
- Characteristics of adults who report at least one ACE; and
- Association of ACEs with adult health outcomes and risk behaviors.



# ACEs Questionnaire

- **Developed originally for the Kaiser-CDC study (Am J Prev Med Vol 4: 245);**
- **Modified and offered in Behavioral Risk Factor Surveillance System (BRFSS) to adults from 2009-2012 (MMWR Vol 59(49): 1609);**
- **Prevalence reports are available for Connecticut, Minnesota, Montana, Vermont, Washington, and Wisconsin.**



I'd like to ask you some questions about events that happened during your childhood. This information will allow us to better understand problems that may occur early in life, and may help others in the future. This is a sensitive topic and some people may feel uncomfortable with these questions. At the end of this section, I will give you a phone number for an organization that can provide information and referral for these issues. Please keep in mind that you can ask me to skip any question you do not want to answer.

All questions refer to the time period before you were 18 years of age. Now, looking back before you were 18 years of age -

### ACES Questions

1. Did you live with anyone who was depressed, mentally ill, or suicidal?
2. Did you live with anyone who was a problem drinker or alcoholic?
3. Did you live with anyone who used illegal street drugs or who abused prescription medications?
4. Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
5. Were your parents separated or divorced?
6. How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?
7. Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking.
8. How often did a parent or adult in your home ever swear at you, insult you, or put you down?
9. How often did anyone at least 5 years older than you or an adult touch you sexually?
10. How often did anyone at least 5 years older than you or an adult try to make you touch them sexually?
11. How often did anyone at least 5 years older than you or an adult force you to have sex?

As I mentioned when we started this section, I would give you a phone number for an organization that can provide information and referral for these issues. You can dial [insert state or local hotline] to reach a referral service to locate an agency in your area. [If no local or state hotline is available, give respondent the National Hotline for child abuse 1-800-422-4-A-CHILD (1-800-422-4453).]



# Connecticut Behavioral Risk Factor Surveillance System (CT BRFSS)

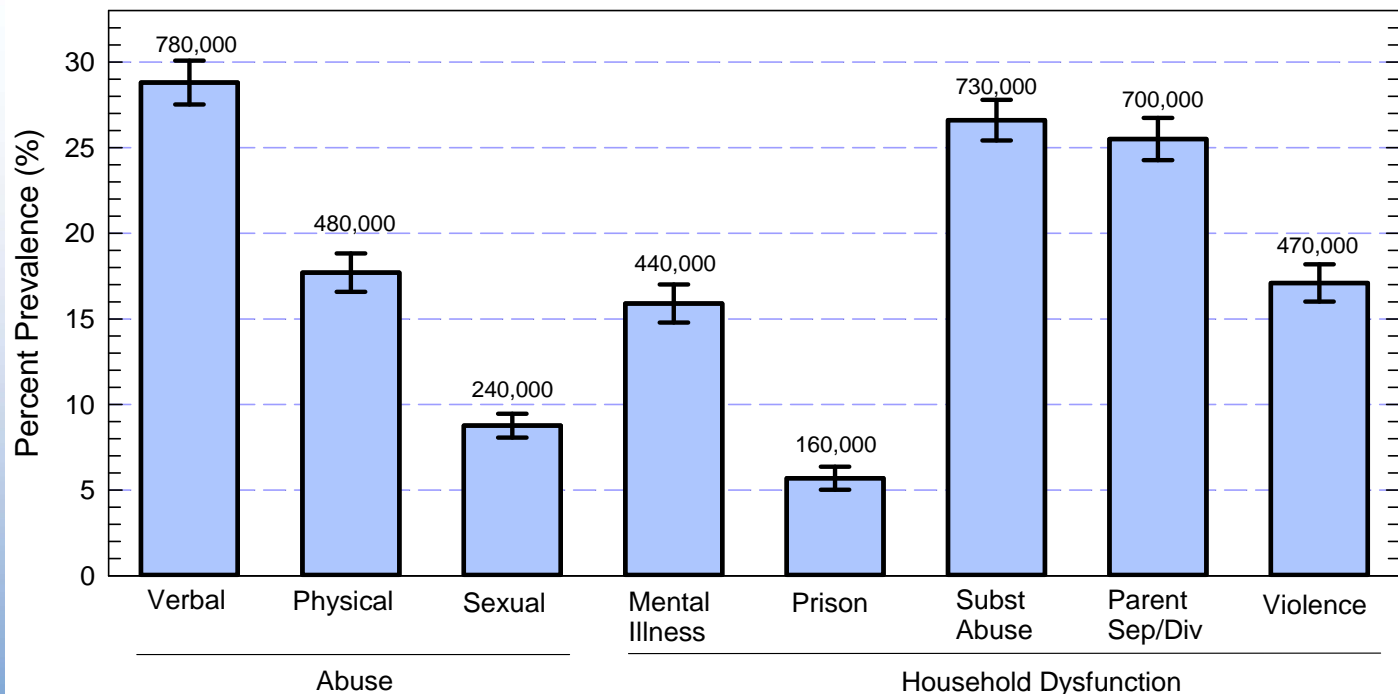
- Ongoing anonymous statewide phone survey (landline and cell phone);
- Funded by CDC to all states in country;
- Managed by the Connecticut Department of Public Health;
- Twenty-five minute survey among adults 18 + years;
- Responses weighted to create population-based estimates;
- In 2012, Connecticut offered the set of 10 questions from September 1, 2012 – December 31, 2012.



# Prevalence of ACEs in Connecticut, by type

**1 in 3** adults in CT report at least one type of childhood abuse.

**Half** of all adults in CT report at least one type of household dysfunction during childhood.



Weighted frequency of each type of ACE in the population of adult Connecticut residents is shown above the bars, assuming a statewide adult population of 2.8 million.

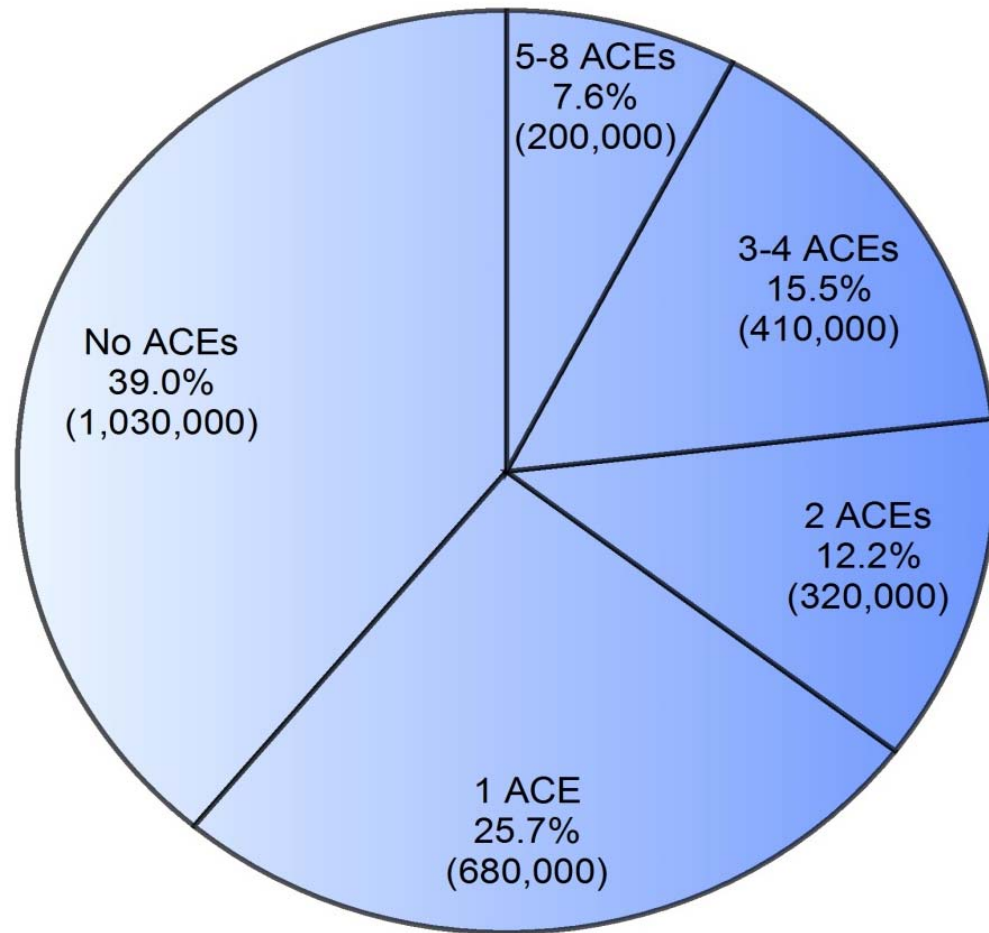




# Burden of ACEs in Connecticut, by number of ACEs

**6 in 10** adults in Connecticut report at least one ACE.

**1 in 13** adults in Connecticut report at least 5 different types of ACEs, affecting 200,000 adult residents.



Weighted frequency estimates among adults in Connecticut are shown in parentheses.



# Burden of ACEs in Connecticut, by number of ACEs

**Adults in Connecticut who experienced verbal abuse in childhood are more likely to have also experienced:**

- Substance abuse in the household;
- Physical abuse;
- Household domestic violence;
- Divorce/separation in the household;
- Mental illness in the household.

**The prevalence of adults in Connecticut who experienced 5-8 ACEs in childhood is highest among those who experienced:**

- Incarceration;
- Domestic violence in the household; or
- Sexual abuse.



# Characteristics of Adults in Connecticut, at least one ACE

Characteristic	Percent Prevalence	
	(%)	95% CI
<b>Housing Arrangement</b>		
Own	56.9	53.7-60.1
Rent	<b>73.2</b>	<b>68.3-78.2</b>
<b>Education</b>		
Less than HS Degree	72.1	62.7-81.6
HS Degree	60.5	54.9-66.1
More than HS	59.6	56.4-62.8

Characteristic	Percent Prevalence	
	(%)	95% CI
<b>Sex</b>		
Male	63.0	58.8-67.1
Female	59.3	55.8-62.7
<b>Race/Ethnicity</b>		
non-Hispanic White	58.8	55.9-61.7
<b>non-Hispanic Black/Afr Am/Other/Multi*</b>	<b>72.3</b>	<b>62.1-82.5</b>
<b>Hispanic/Latino*</b>	<b>74.8</b>	<b>66.0-83.7</b>

Characteristic	Percent Prevalence	
	(%)	95% CI
<b>Age Group</b>		
18-24 yo	61.8	49.3-74.4
<b>25-34 yo*</b>	<b>72.0</b>	<b>64.4-79.5</b>
35-54 yo	67.3	63.2-71.4
55 + yo	51.6	48.1-55.0

**Among adults in Connecticut with at least one ACE, significantly more:**

- Live in rental housing or other housing situations;
- Are 25-34 years of age; and
- Are of minority race/ethnicity.



# Association Study - Covariates

- **Multivariate logistic regression**

Number of ACEs: 1-2 types of ACEs, 3-8 types of ACEs, no ACEs (ref);

- **Responses (49,478) in CT, MN, MT, VT, WA, and WI during 2011-2012;**

- **Model controlled for:**

Sex: male, female (ref);

Age: 18-34, 35-54, 55 and older (ref);

Living arrangement: rent/other arrangement, own home (ref);

Education: high school degree or less, more than high school degree (ref).



# Methods – Adult Risk Behaviors

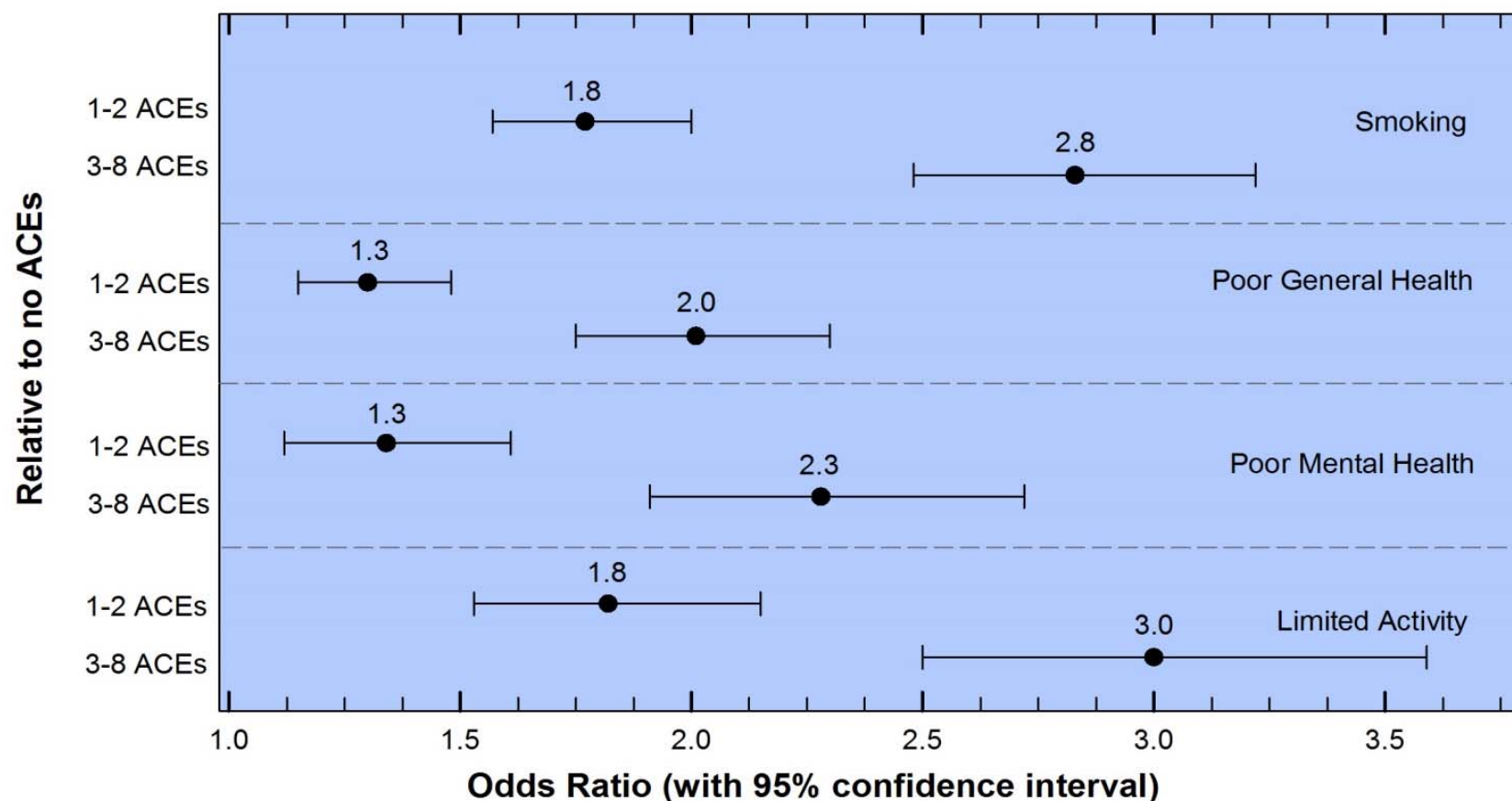
- **Current Smoker and at least 100 total cigarettes;**
- **Don't always use a seatbelt;**
- **Heavy drinker (more than 2 drinks daily for men, more than 1 drink daily for women);**
- **Binge drinker (more than 5 drinks per occasion for men, more than 4 drinks for women).**

# Methods – Adult Health Outcomes

## Adding Current Smoker as a covariate:

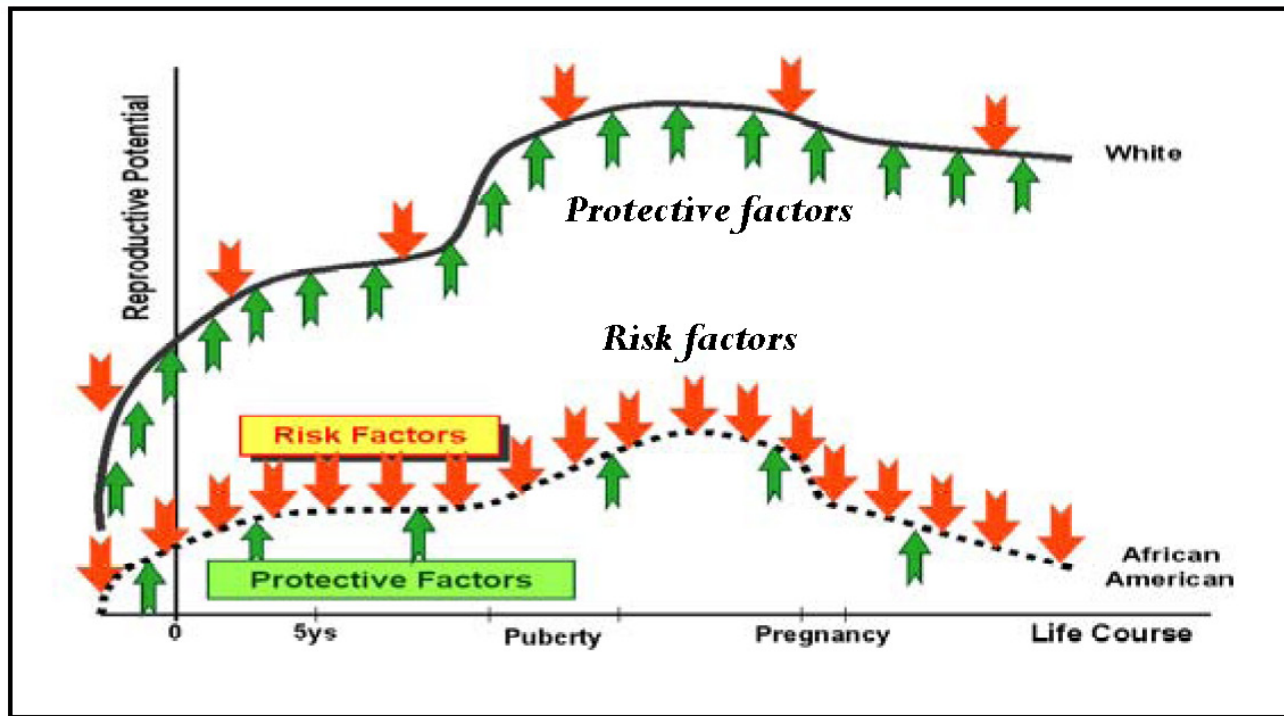
- Poor general health (at least 14 days in past month);
- Poor mental health (at least 14 days in past month);
- Poor physical health (at least 14 days in past month);
- Limited activity due to poor physical health (at least 14 days in past month).

# Association of ACEs with Adult Health Outcomes & Risky Behaviors



As the number of ACEs during childhood **increases**, the risk of poor general and mental health, limited activity, and smoking in adulthood **increases**.

# Health Across the Lifespan



Source:

Contra Costa Health Services,  
 ([http://cchealth.org/groups/lifecourse/pdf/lci\\_fact\\_sheet.pdf](http://cchealth.org/groups/lifecourse/pdf/lci_fact_sheet.pdf))

**Lifecourse Theory:** Events early in childhood affect a woman's health during her childbearing years:

- Connects childhood health to adult health;
- Explains weathering phenomenon.

**Objective:** Maximize protective factors and reduce risk factors for optimal health across the lifespan.





# Promising Practices in Connecticut

- **Educate clinical and social service providers about childhood trauma & trauma-focused care;**
- **Screen for childhood trauma in clinic practices and programs that serve adults;**
- **Offer trauma-informed interventions to reduce adult risk behaviors and poor health outcomes;**
- **Emphasize trauma-focused perinatal care to improve pregnancy & birth outcomes.**



# General Resources on ACEs

- Stone, C (2013) Association between number of adverse events in childhood and adult risk behaviors and poor health outcomes, Connecticut Department of Public Health, Hartford, Connecticut (<http://www.ct.gov/dph/brfss>).
- Smith, MV, Gotman, N, Yonkers, K, Early childhood adversity and pregnancy outcomes, *manuscript pending review*.
- Bynum, L, Griffin, T, Ridings, DL, Wynkoop, KS, Anda, RF, Edwards, VJ, Strine, RW, Liu, Y, McKnight-Eily, LR, Croft, JB (2010) Adverse childhood experiences reported by adults—Five states, 2009, *Morbidity and Mortality Weekly Report* 59(49):1609-1613.
- ACEs Connecticut (<http://acesconnection.com/>).
- National Council for Community Behavioral Healthcare (<http://www.thenationalcouncil.org/topics/trauma-informed-care>).



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# Thank you!

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**ACEs documents generated from the CT BRFSS can be downloaded at:**

***<http://www.ct.gov/dph/BRFSS>***