ADVERSE CHILDHOOD EXPERIENCES AND BEHAVIORAL HEALTH

Presentation to the State Epidemiological Outcomes Workgroup By Aileen Fink, Ph.D. <u>aileen.fink@state.de.us</u> December 16, 2016

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ADVERSE CHILDHOOD EXPERIENCES

- What are Adverse Childhood Experiences (ACEs)?
 - Events/experiences that occur prior to age 18 such as abuse, neglect, and household functioning problems including substance use

• Why are ACEs important?

- Exposure to ACEs is common
- ACE exposure has been shown to correlate with adoption of health risk behaviors and development of chronic health problems
 - Given the prevalence of exposure and impact on health, ACEs are being called a major public health problem
- Understanding ACEs provides opportunities for prevention and intervention to promote health and wellbeing

ACE DATA SOURCES

SURVEY	DATA COLLECTION	# PARTICIPANTS	ACE EVENTS
Kaiser/CDC	1995-97	17,377	10 ACEs Physical, sexual, emotional abuse; physical, emotional neglect, divorce/separation, household mental illness, household substance use, incarceration, domestic violence
Delaware Household Health Survey (DHHS)	2015	2,609	12 ACEs Physical, sexual, emotional abuse; physical, emotional neglect; divorce/separation; household mental illness; household substance use; incarceration; domestic violence; discrimination; bullying
National Survey of Children's Health (NSCH)	2011-12	1,824	9 ACEs Divorce/separation; household mental illness; household substance use; incarceration; domestic violence; Economic hardship; parental death; community violence; discrimination

ITEM WORDING

Mental Illness

- Kaiser and DHHS: "Was a household member depressed or mentally ill or did a household member attempt suicide?"
- NSCH: "Did [child] ever live with someone who was mentally ill or suicidal, or severely depressed for more than a couple of weeks?"

Substance Use

- Kaiser and DHHS: "Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?"
- NSCH: "Did [child] ever live with someone who had a problem with alcohol or drugs?"

KAISER/CDC ACE STUDY n=17,377

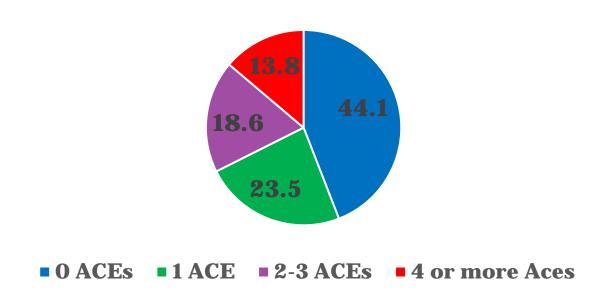
Study found that ACEs

- were common
- [•] co-occured
- had a dose-response relationship with a wide range of physical and behavioral health outcomes including depression, suicide and substance use problems

<u>http://vetoviolence.cdc.gov/apps/phl/resource</u> <u>center_infographic.html</u>

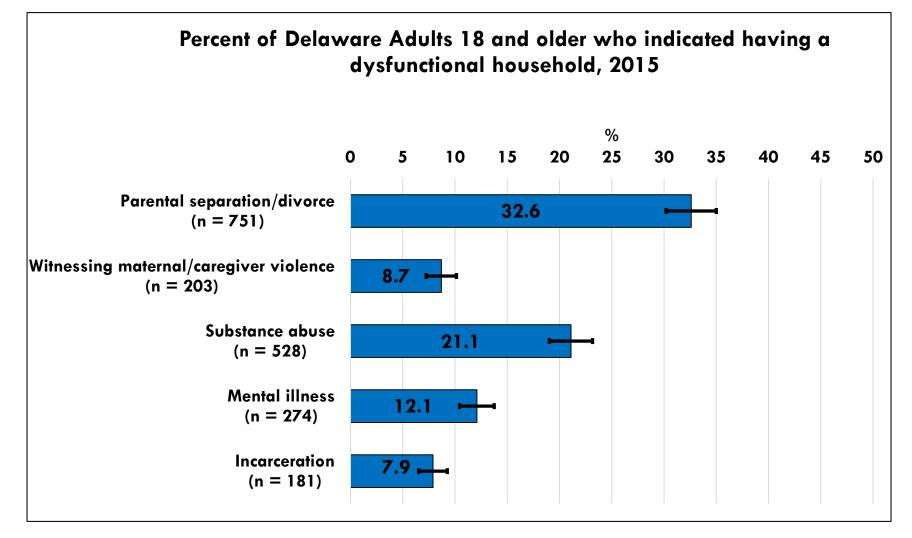
DELAWARE ADULT ACE DATA n=2,506

- The Delaware Public Health Institute conducted a household survey of Delaware adults via landline/cell phone
 - Survey asked a variety of health indicators including overall health, diagnosis of mental illness and substance use problems

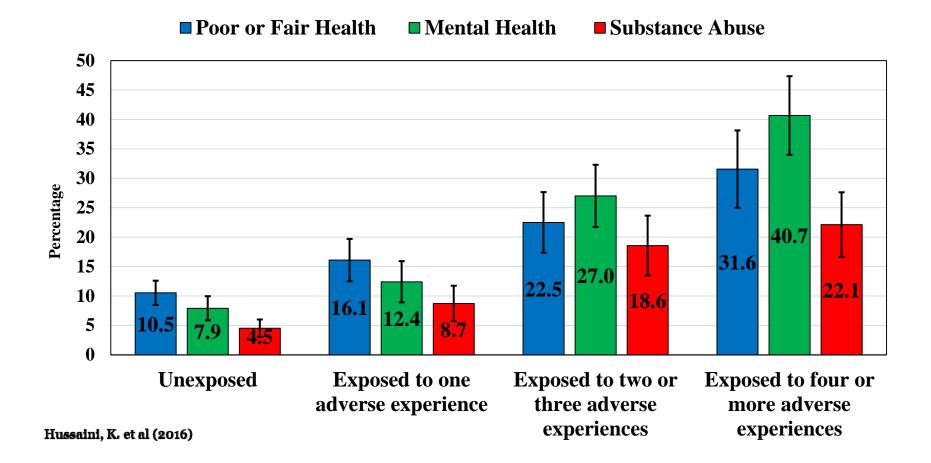


Percent

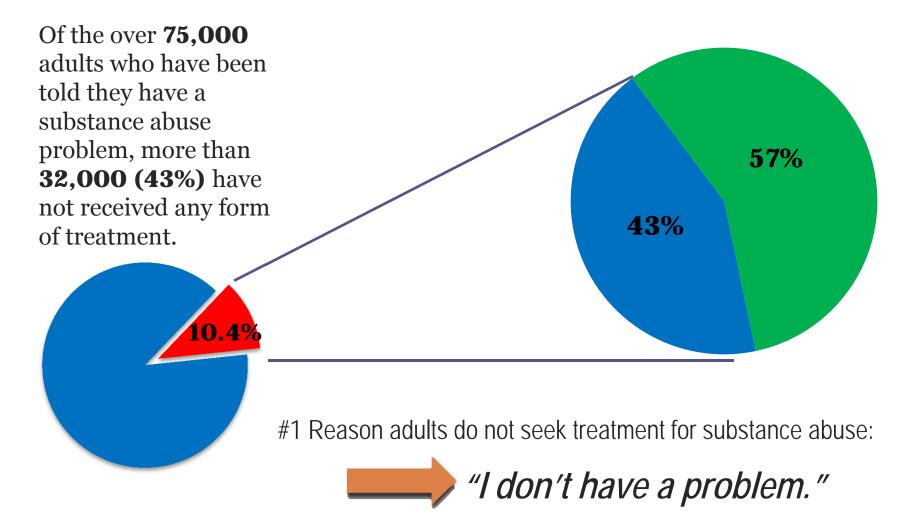
EXPOSURE TO HOUSEHOLD FUNCTIONING PROBLEMS



ACE EXPOSURE AND PHYSICAL & BEHAVIOR HEALTH



SUBSTANCE USE AND TREATMENT



ACES AND ADULT HEALTH OUTCOMES

ACEs and Health Conditions 13.00 12.00 11.00 10.00 9.00 8.00 7.00 6.3 6.00 5.00 4.00 3.00 2.4 2.00 **↓** 1.5 **↓** 1.4 **蜝** 1.4 **▲** 1.3 **↓** 1.2 1.00 0.00 Self-harm Smoking Asthma¶ **Diabetes** Heart **Obesity High Blood** Disease Pressure

Adjusted Odds Ratio* with 95% Confidence Intervals for Exposure to any

Notes: ACE variable is a dichotomous variable with "unexposed" as referent category

*Adjusted for gender, age, and race and ethnicity.

[¶]Not statistically significant

Hussaini, K. et al (2016)

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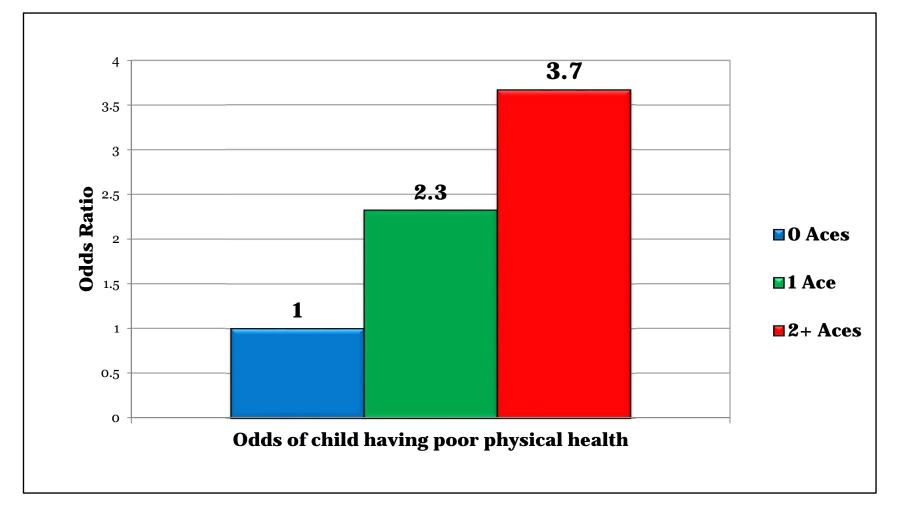
NATIONAL SURVEY OF CHILDREN'S HEALTH (NSCH)

- Over 100 indicators of child health & wellbeing as reported by the child's parent or guardian
 - Funded by the Maternal and Child Health Bureau; conducted by the CDC and Prevention's National Center for Health Statistics
 - Primarily landline
 - 2011-12 survey added 9 ACE events
 - Health indicators include overall health status, chronic health conditions, flourishing, ADHD, Autism, use of medication for behavioral health, developmental delay

NSCH DELAWARE CHILD ACE DATA (n=1,824)

- Prevalence of exposure
 - 48% of children had been exposed to at least one
- Most frequent ACE types
 - Economic hardship= 25% often or somewhat
 - Divorce/separation=21%
 - Neighborhood violence=12%
- Number of ACE exposures was correlated with:
 - health status
 - flourishing

ACES AND OVERALL HEALTH OF DE CHILDREN

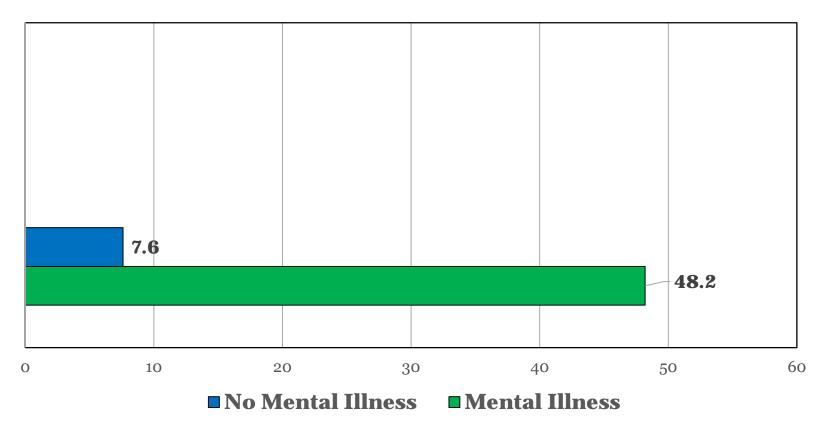


HOUSEHOLD MENTAL ILLNESS

- Delaware children living with an *adult with mental illness* were significantly more likely to:
 - be exposed to 5 or more of the other ACEs
 - experience separation from a caregiver
 - 7 times more likely to have parent incarcerated
 - 3 times more likely to have parent who died
 - 4 times more likely to have parents separated/divorced
 - be described as having poor health and chronic health conditions
 - **More likely to be living with an adult with substance use

RELATIONSHIP HOUSEHOLD SUBSTANCE ABUSE

% Delaware Children Exposed to Household Substance Use Problems



ACE DATA LIMITATIONS

- Exposure type differences across surveys
- Question wording different across surveys
 - Original ACE survey suicide question: Have you ever attempted to commit suicide?
 - DHHS suicide question: During the past 12 months, was there ever a time you felt so sad or hopeless that you wanted to do something to purposely hurt yourself or end your life
- Survey administration differences
- Correlational data

DISCUSSION?



THANK YOU!